

VLADIK Y. KREINOVICH

Work Address

Computer Science Department
University of Texas at El Paso
500 W. University
El Paso, TX 79968
phone (915) 747-6951
fax (915) 747-5030
email vladik@utep.edu
URL <http://www.cs.utep.edu/vladik>

Home address

1003 Robinson
El Paso, TX 79902
phone (915) 544-3543

Education

INSTITUTE OF MATHEMATICS
SIBERIAN BRANCH
SOVIET ACADEMY OF SCIENCES
Ph.D. in Mathematics May 1979. Novosibirsk, Russia

LENINGRAD UNIVERSITY St. Petersburg, Russia
M.S. in Mathematics and B.S. in Computer Science
December 1974. Diploma summa cum laude.

Experience

UNIVERSITY OF TEXAS AT EL PASO El Paso, TX
1997-present
Professor.

UNIVERSITY OF TEXAS AT EL PASO El Paso, TX
1990-1997
Associate Professor.

CHIANG MAI UNIVERSITY Chiang Mai, Thailand
2009-present
Adjunct Professor

CENTER FOR COMPUTATIONAL SCIENCES Houston, TX
AND ADVANCED DISTRIBUTED SIMULATION
2001-present
Research Associate

LEIBNIZ UNIVERSITY OF HANNOVER Hannover, Germany
May-June 2017
Merkator Fellow

UNIVERSITY OF OSTRAVA Ostrava, Czech Republic
July-August 2011
Visiting Professor

UNIVERSITY OF OSTRAVA Ostrava, Czech Republic
May-June 2009

Visiting Researcher
TECHNION
ISRAEL INSTITUTE OF TECHNOLOGY
March 2009
Haifa, Israel

Visiting Researcher
KING MONGKUT'S UNIVERSITY
OF TECHNOLOGY NORTH BANGKOK
December 2008–January 2009
Bangkok, Thailand

Visiting Professor
MAX PLANCK INSTITUT FÜR MATHEMATIK
May – June 2007
Bonn, Germany

Visiting Researcher
JAPAN ADVANCED INSTITUTE OF SCIENCE
AND TECHNOLOGY
March 2007
Ishikawa, Japan

Visiting Researcher
UNIVERSITY OF TEXAS AT AUSTIN
February – March 2006
Austin, Texas

Visiting Researcher
CATHOLIC UNIVERSITY OF PELOTAS
December 2003–January 2004
Pelotas, Brazil

Visiting Professor
EULER INTERNATIONAL MATHEMATICAL
INSTITUTE
August 2002
St. Petersburg, Russia

Visiting Researcher
FIELDS INSTITUTE FOR RESEARCH
IN MATHEMATICAL SCIENCES
May 2002
Toronto, Canada

Visiting Faculty Member
CHINESE UNIVERSITY OF HONG KONG
December 1998–January 1999
Hong Kong, China

Academic Visitor
INSTITUTE FOR MATHEMATICS
AND ITS APPLICATIONS
August 1996
Minneapolis, MN

Visiting Researcher
UNIVERSITY OF PARIS VI
Summer 1996
Paris, France

Invited Professor
Laforia, Laboratory of Forms and Artificial Intelligence

STANFORD UNIVERSITY
1989

Stanford, CA

Visiting Scholar
Computer Science Department and
Institute for Mathematical Studies
in the Social Sciences.

NATIONAL RESEARCH INSTITUTE FOR
ELECTRICAL MEASURING INSTRUMENTS
1986–1989

St. Petersburg, Russia

Leading Research Associate

CENTER FOR NEW INFORMATIONAL
TECHNOLOGY "INFORMATIKA"
1988–1989

St. Petersburg, Russia

Senior Research Associate

LENINGRAD UNIVERSITY
1988–1989

St. Petersburg, Russia

Lecturer, Special Mathematical College

ACADEMY OF SCIENCES
NATIONAL COUNCIL ON CYBERNETICS
AND ARTIFICIAL INTELLIGENCE
1985–1989

Moscow, Russia

Research Associate
Committee on Applications of Mathematical Logic

LENINGRAD ELECTRICAL ENGINEERING
INSTITUTE
1985–1989

St. Petersburg, Russia

Lecturer, Department of Mathematical Logic

NATIONAL RESEARCH INSTITUTE FOR
ELECTRICAL MEASURING INSTRUMENTS
1983–1986

St. Petersburg, Russia

Senior Research Associate

NATIONAL RESEARCH INSTITUTE FOR
ELECTRICAL MEASURING INSTRUMENTS
1980–1983

St. Petersburg, Russia

Research Associate

EXPERIMENTAL COLLEGE OF
INTENSIVE EDUCATION
LABORATORY OF EXPERIMENTAL

St. Petersburg, Russia

PSYCHOLOGICAL SYSTEMS

1980–1983

Professor

SOVIET SPACE SHUTTLE PROGRAM
NATIONAL INSTITUTE OF SCIENTIFIC
INSTRUMENTS

St. Petersburg, Russia

1982

Senior Research Associate

LENINGRAD PEDAGOGICAL INSTITUTE
1981

St. Petersburg, Russia

Lecturer, Mathematical Department

SPECIAL ASTROPHYSICAL OBSERVATORY
1978–1980

St. Petersburg, Russia

Senior Research Associate

INSTITUTE OF MATHEMATICS
1975–1978

Novosibirsk, Russia

Research Associate

NOVOSIBIRSK UNIVERSITY
1975–1976

Novosibirsk, Russia

Lecturer, Mathematics Department

NOVOSIBIRSK ELECTRICAL ENGINEERING
INSTITUTE

Novosibirsk, Russia

1975–1976

Research Associate

LENINGRAD UNIVERSITY
1973–1974

St. Petersburg, Russia

Director, Honors Program, Mathematics Department

LENINGRAD UNIVERSITY
1970–1973

St. Petersburg, Russia

Lecturer, Honors Program

Mathematics and Astronomy Department

ACADEMY OF SCIENCES, KOMI BRANCH
1973

Syktyvkar, Russia

Research Associate

Department of Mathematics and Computer Science

Research Activities

More than 1,300 research publications in books, journals, and peer-refereed conference proceedings; this number includes more than 450 publications with student co-authors.

Research Books

L. Octavio Lerma and Vladik Kreinovich, *Towards Analytical Techniques for Optimizing Knowledge Acquisition, Processing, Propagation, and Use in Cyberinfrastructure and Big Data Applications*, Springer Verlag, to appear.

Joe Lorkowski and Vladik Kreinovich, *Bounded Rationality in Decision Making Under Uncertainty: Towards Optimal Granularity*, Springer Verlag, Cham, Switzerland, 2018.

Christian Servin and Vladik Kreinovich, *Propagation of Interval and Probabilistic Uncertainty in Cyberinfrastructure-Related Data Processing and Data Fusion*, Springer Verlag, Berlin, Heidelberg, 2015.

Jaime Nava and Vladik Kreinovich, *Algorithmic Aspects of Analysis, Prediction, and Control in Science and Engineering: An Approach Based on Symmetry and Similarity*, Springer Verlag, Berlin, Heidelberg, 2015.

Hung T. Nguyen, Vladik Kreinovich, Berlin Wu, and Gang Xiang, *Computing Statistics under Interval and Fuzzy Uncertainty*, Springer Verlag, Berlin, Heidelberg, 2012.

Shoumei Li, Yukio Ogura, and Vladik Kreinovich, *Limit Theorems and Applications of Set Valued and Fuzzy Valued Random Variables*, Kluwer Academic Publishers, Dordrecht, 2002.

Vladik Kreinovich, Anatoly Lakeyev, Jiří Rohn, and Patrick Kahl, *Computational complexity and feasibility of data processing and interval computations*, Kluwer, Dordrecht, 1998.

Hung T. Nguyen and Vladik Kreinovich, *Applications of continuous mathematics to computer science*, Kluwer, Dordrecht, 1997.

Edited Research Books

Martine Ceberio and Vladik Kreinovich (eds.), *Constraint Programming and Decision Making: Theory and Applications*, Springer Verlag, Berlin, Heidelberg, to appear.

Vladik Kreinovich (ed.), *Uncertainty Modeling*, Springer Verlag, Cham, Switzerland, 2017.

Vladik Kreinovich, Songsak Sriboonchitta, and Van Nam Huynh (eds.), *Robustness in Econometrics*, Springer Verlag, Cham, Switzerland, 2017.

Van Nam Huynh, Vladik Kreinovich, and Songsak Sriboonchitta (eds.), *Causal Inference in Econometrics*, Springer Verlag, Cham, Switzerland, 2016.

Van-Nam Huynh, Vladik Kreinovich, Songsak Sriboonchitta, and Komsan Suriya (eds.), *Econometrics of Risk*, Springer Verlag, Berlin, Heidelberg, 2015.

Martine Ceberio and Vladik Kreinovich (eds.), *Constraint Programming and Decision Making*, Springer Verlag, Berlin, Heidelberg, 2014.

Van-Nam Huynh, Vladik Kreinovich, and Songsak Sriboonchitta (eds.), *Modeling Dependence in Econometrics*, Springer Verlag, Berlin, Heidelberg, 2014.

Mo Jamshidi, Vladik Kreinovich, and Janusz Kacprzyk (eds.), *Advance Trends in Soft Computing*, Springer Verlag, Berlin, Heidelberg, 2013.

Van-Nam Huynh, Vladik Kreinovich, Songsak Sriboonchitta, and Komsan Suriya (eds.), *Uncertainty Analysis in Econometrics, with Applications*, Springer Verlag, Berlin, Heidelberg, 2013.

Chenyi Hu, R. Baker Kearfott, Andre de Korvin, and Vladik Kreinovich (eds.), *Knowledge Processing with Interval and Soft Computing*, Springer Verlag, London, 2008.

Witold Pedrycz, Andrzej Skowron, and Vladik Kreinovich (eds.), *Handbook on Granular Computing*, Wiley, Chichester, UK, 2008.

Van-Nam Huynh, Yoshiteru Nakamori, Hiroakira Ono, Jonathan Lawry, Vladik Kreinovich, and Hung T. Nguyen (eds.), *Interval/Probabilistic Uncertainty and Non-Classical Logics*, Springer-Verlag, Berlin-Heidelberg-New York, 2008.

L. Reznik and V. Kreinovich (eds.), *Soft Computing in Measurements and Information Acquisition*, Springer-Verlag, Berlin-Heidelberg, 2003.

Vladik Kreinovich and Grigory Mints (eds.), *Problems of reducing the exhaustive search*, American Mathematical Society (AMS Translations — Series 2, Vol. 178), Providence, RI, 1997.

R. Baker Kearfott and Vladik Kreinovich (eds.), *Applications of Interval Computations*, Kluwer, Dordrecht, 1996.

Collaboration in Edited Research Books

Solomon Feferman and Wilfried Sieg (eds.), with the collaboration of Vladik Kreinovich, Vladimir Lifschitz, and Ruy de Queiroz, *Proofs, Categories and Computations: Essays in honor of Grigori Mints*, College Publications, London, UK, 2010.

Research Book Chapters

Andrzej Pownuk, Vladik Kreinovich, Songsak Sriboonchitta, “Fuzzy Data Processing Beyond Min t-Norm”, In: Christian Berger-Vachon, Ana Mara Gil Lafuente, Janusz Kacprzyk, Yuriy Kondratenko, José M. Merigo Lindahl, and Carlo Morabito (eds.), *Complex Systems: Solutions and Challenges in Economics, Management, and Engineering*, Springer Verlag, to appear.

Vladik Kreinovich and Thongchai Dumrongpokaphan, “Optimal Group Decision Making Criterion and How It Can Help to Decrease Poverty, Inequality, and Discrimination”, In: Mikael Collan and Janusz Kacprzyk (editors), *Soft Computing Applications for Group Decision Making and Consensus Modeling*, Springer Verlag, to appear.

Vladik Kreinovich, Luc Longpre, and Adriana Beltran, “QFT + NP = P: Quantum Field Theory (QFT) – a possible way of solving NP-complete problems in polynomial time”, In: Aboul Ella Hassanien, Mohamed Elhoseny, Ahmed Farouk, and Janusz Kacprzyk (eds.), *Quantum Computing: an Environment for Intelligent Large Scale Real Application*, Springer Verlag, to appear.

Andrzej Pownuk and Vladik Kreinovich, “(Hypothetical) negative probabilities can speed up uncertainty propagation algorithms”, In: Aboul Ella Hassanien, Mohamed Elhoseny, Ahmed Farouk, and Janusz Kacprzyk (eds.), *Quantum Computing: an Environment for Intelligent Large Scale Real Application*, Springer Verlag, to appear.

Martine Ceberio, Olga Kosheleva, and Vladik Kreinovich, “Optimizing $\text{pred}(25)$ Is NP-Hard”, In: Martine Ceberio and Vladik Kreinovich (eds.), *Constraint Programming and Decision Making: Theory and Applications*, Springer Verlag, Berlin, Heidelberg, to appear.

Martine Ceberio, Olga Kosheleva, and Vladik Kreinovich, “Constraint Approach to Multi-Objective Optimization”, In: Martine Ceberio and Vladik Kreinovich (eds.), *Constraint Programming and Decision Making: Theory and Applications*, Springer Verlag, Berlin, Heidelberg, to appear.

Chrysostomos D. Stylios and Vladik Kreinovich, “Dow Theory’s Peak-and-Trough Analysis Justified”, In: Martine Ceberio and Vladik Kreinovich (eds.), *Constraint Programming and Decision Making: Theory and Applications*, Springer Verlag, Berlin, Heidelberg, to appear.

Chitta Baral, Olac Fuentes, and Vladik Kreinovich, “Why Deep Neural Networks: A Possible Theoretical Explanation”, In: Martine Ceberio and Vladik Kreinovich (eds.), *Constraint Programming and Decision Making: Theory and Applications*, Springer Verlag, Berlin, Heidelberg, to appear.

Christian Servin and Vladik Kreinovich, “Comparisons of Measurement Results as Constraints on Accuracies of Measuring Instruments: When Can We Determine the Accuracies from These Constraints?”, In: Martine Ceberio and Vladik Kreinovich (eds.), *Constraint Programming and Decision Making: Theory and Applications*, Springer Verlag, Berlin, Heidelberg, to appear.

Martine Ceberio, Olga Kosheleva, and Vladik Kreinovich, “From Global to Local Constraints: A Constructive Version of Bloch’s Principle”, In: Martine Ceberio and Vladik Kreinovich (eds.), *Constraint Programming and Decision Making: Theory and Applications*, Springer Verlag, Berlin, Heidelberg, to appear.

Martine Ceberio, Olga Kosheleva, and Vladik Kreinovich, “Range Estimation under Constraints is Computable Unless There Is a Discontinuity”, In: Martine Ceberio and Vladik Kreinovich (eds.), *Constraint Programming and Decision Making: Theory and Applications*, Springer Verlag, Berlin, Heidelberg, to appear.

Juan Carlos Figueroa Garcia, Martine Ceberio, and Vladik Kreinovich, “Algebraic Product is the Only t-Norm for Which Optimization Under Fuzzy Constraints is Scale-Invariant”, In: Martine Ceberio and Vladik Kreinovich (eds.), *Constraint Programming and Decision Making: Theory and Applications*, Springer Verlag, Berlin, Heidelberg, to appear.

Martine Ceberio, Olga Kosheleva, and Vladik Kreinovich, “Towards a Physically Meaningful Definition of Computable Discontinuous and Multi-Valued Functions (Constraints)”, In: Martine Ceberio and Vladik Kreinovich (eds.), *Constraint Programming and Decision Making: Theory and Applications*, Springer Verlag, Berlin, Heidelberg, to appear.

Olga Kosheleva, Martine Ceberio, and Vladik Kreinovich, “Peak-End Rule: A Utility-Based Explanation”, In: Martine Ceberio and Vladik Kreinovich (eds.), *Constraint Programming and Decision Making: Theory and Applications*, Springer Verlag, Berlin, Heidelberg, to appear.

Vladik Kreinovich and Guoqing Liu, “We live in the best of possible worlds: Leibniz’s insight helps to derive equations of modern physics”, In: Raffaele Pisano, Michel Fichant, Paolo Bussotti, and Agamenon R. E. Oliveira (eds.), *The Dialogue between Sciences, Philosophy and Engineering. New Historical and Epistemological Insights, Homage to Gottfried W. Leibniz 1646–1716*, College Publications, London, 2017, pp. 207–226.

Songsak Sriboonchitta, Hung T. Nguyen, Vladik Kreinovich, and Olga Kosheleva, “Robustness as a Criterion for Selecting a Probability Distribution Under Uncertainty”, In: Vladik Kreinovich, Songsak Sriboonchitta, and Van Nam Huynh (eds.), *Robustness in Econometrics*, Springer Verlag, Cham, Switzerland, 2017, pp. 51–68.

Thongchai Dumrongpokaphan and Vladik Kreinovich, “Why Cannot We Have a Strongly Consistent Family of Skew Normal (and Higher Order) Distributions”, In: Vladik Kreinovich, Songsak Sriboonchitta, and Van Nam Huynh (eds.), *Robustness in Econometrics*, Springer Verlag, Cham, Switzerland, 2017, pp. 69–78.

Olga Kosheleva, Vladik Kreinovich, and Songsak Sriboonchitta, “Econometric Models of Probabilistic Choice: Beyond McFadden’s Formulas”, In: Vladik Kreinovich, Songsak Sriboonchitta, and Van Nam Huynh (eds.), *Robustness in Econometrics*, Springer Verlag, Cham, Switzerland, 2017, pp. 79–88.

Olga Kosheleva, Vladik Kreinovich, and Thongchai Dumrongpokaphan, “How to Explain Ubiquity of Constant Elasticity of Substitution (CES) Production and Utility Functions Without Explicitly Postulating CES”, In: Vladik Kreinovich, Songsak Sriboonchitta, and Van Nam Huynh (eds.), *Robustness in Econometrics*, Springer Verlag, Cham, Switzerland, 2017, pp. 89–98.

Kongliang Zhu, Nantiworn Thianpaen, and Vladik Kreinovich, “How to Make Plausibility-Based Forecasting More Accurate”, In: Vladik Kreinovich, Songsak Sriboonchitta, and Van Nam Huynh (eds.), *Robustness in Econometrics*, Springer Verlag, Cham, Switzerland, 2017, pp. 99–110.

Hung T. Nguyen, Vladik Kreinovich, Olga Kosheleva, and Songsak Sriboonchitta, “Why Is Linear Quantile Regression Empirically Successful: A Possible Explanation”, In: V. Kreinovich (ed.), *Uncertainty Modeling*, Springer Verlag, Cham, Switzerland, 2017, pp. 159–168.

Vladik Kreinovich, Hung T. Nguyen, Songsak Sriboonchitta, and Olga Kosheleva, “Modeling Extremal Events Is Not Easy: Why the Extreme Value Theorem Cannot Be As General As the Central Limit Theorem” In: V. Kreinovich (ed.), *Uncertainty Modeling*, Springer Verlag, Cham, Switzerland, 2017, pp. 123–134.

Vladik Kreinovich and Olga Kosheleva, “What Is Computable? What Is Feasibly Computable? A Physicist’s Viewpoint”, In: Andrew Adamatzky (ed.), *Advances in Unconventional Computing*, Springer Verlag, 2017, pp. 31–58.

Vladik Kreinovich, Andrzej Pownuk, and Olga Kosheleva, “Combining Interval and Probabilistic Uncertainty: What Is Computable?”, in: Panos Pardalos, Anatoly Zhigljavsky, and Julius Zilinskas (eds.), *Advances in Stochastic and Deterministic Global Optimization*, Springer Verlag, Cham, Switzerland, 2016, pp. 13–32.

Joe Lorkowski and Vladik Kreinovich, “Fuzzy Logic Ideas Can Help in Explaining Kahneman and Tversky’s Empirical Decision Weights”, In: Lotfi Zadeh et al. (Eds.), *Recent Developments and New Direction in Soft-Computing Foundations and Applications*, Springer Verlag, 2016, pp. 89–98.

Vladik Kreinovich, “Constructive Mathematics in St. Petersburg, Russia: A (Somewhat Subjective) View from Within”, In: Francine F. Abeles and Mark E. Fuller, *Modern Logic 1850-1950. East and West*, Birkhauser, Basel, 2016, pp. 205–236.

Vladik Kreinovich and Esthela Gallardo, “Optimizing Cloud Use under Interval Uncertainty”, In: Roman Wyrzykowski, Ewa Deelman, Jack Dongarra, Konrad Karczewski, Jacek Kitowski, and Kazimierz Wiatr (eds.), *Parallel Processing and Applied Mathematics*, Springer Verlag, Cham, Switzerland, 2016, pp. 435–444.

Vladik Kreinovich and Bui Cong Cuong, “Fuzzy, Intuitionistic Fuzzy, What Next?”, in: Plamen Angelov and Sotir Sotirov (ed.), *Imprecision and Uncertainty in Information Representation and Processing*, Springer Verlag, Cham, Switzerland, 2016, pp. 3–14.

Vladik Kreinovich, Olga Kosheleva, Hung T. Nguyen, and Songsak Sriboonchitta, “Invariance Explains Multiplicative and Exponential Skedastic Functions”, In: Van

Nam Huynh, Vladik Kreinovich, and Songsak Sriboonchitta (eds.), *Causal Inference in Econometrics*, Springer Verlag, Cham, Switzerland, 2016, pp. 119–131.

Vladik Kreinovich, Olga Kosheleva, Hung T. Nguyen, and Songsak Sriboonchitta, “Why Some Families of Probability Distributions Are Practically Efficient: A Symmetry-Based Explanation”, In: Van Nam Huynh, Vladik Kreinovich, and Songsak Sriboonchitta (eds.), *Causal Inference in Econometrics*, Springer Verlag, Cham, Switzerland, 2016, pp. 133–152.

Vladik Kreinovich, Olga Kosheleva, Hung T. Nguyen, and Songsak Sriboonchitta, “Across-the-Board Spending Cuts Are Very Inefficient: A Proof”, In: Van Nam Huynh, Vladik Kreinovich, and Songsak Sriboonchitta (eds.), *Causal Inference in Econometrics*, Springer Verlag, Cham, Switzerland, 2016, pp. 109–118.

Olga Kosheleva, Renata Reiser, and Vladik Kreinovich, “Formalizing the Informal, Precisiating the Imprecise: How Fuzzy Logic Can Help Mathematicians and Physicists by Formalizing Their Intuitive Ideas”, In: Rudolf Seising, Enric Trillas, and Janusz Kacprzyk (eds.), *Towards the Future of Fuzzy Logic*, Springer Verlag, 2015, pp. 301–321.

Joe Lorkowski and Vladik Kreinovich, “Granularity Helps Explain Seemingly Irrational Features of Human Decision Making”, In: Witold Pedrycz and Shyi-Ming Chen (eds.), *Granular Computing and Decision-Making: Interactive and Iterative Approaches*, Springer Verlag, Cham, Switzerland, 2015, pp. 1–31.

Vladik Kreinovich and Olga Kosheleva, “Is the World Itself Fuzzy? Physical Arguments for—and Unexpected Computational Consequences of—Zadeh’s Vision”, In: Dan E. Tamir, Naphtali David Rishe, and Abraham Kandel, *Fifty Years of Fuzzy Logic and Its Applications*, Springer-Verlag, Berlin, Heidelberg, 2015, pp. 297–313.

Vladik Kreinovich, “Dealing with Uncertainties in Computing: from Probabilistic and Interval Uncertainty to Combination of Different Types of Uncertainty”, In: Gerard Olivar Tost and Olga Vasilieva (eds.), *Analysis, Modelling, Optimization, and Numerical Techniques*, Springer Verlag, Berlin, Heidelberg, 2015, pp. 151–172.

Lennox Thompson, Aaron Velasco, and Vladik Kreinovich, “Construction of Shear-Wave Models by Applying Multi-Objective Optimization to Multiple Geophysical Data Sets”, In: Gerard Olivar Tost and Olga Vasilieva (eds.), *Analysis, Modelling, Optimization, and Numerical Techniques*, Springer Verlag, Berlin, Heidelberg, 2015, pp. 309–326.

Vladik Kreinovich, “Interval computations and interval-related statistical techniques: estimating uncertainty of the results of data processing and indirect measurements”, In: Franco Pavese, Wolfram Bremser, Anna Chunovkina, Nicolas Fisher, and Alistair B. Forbes (eds.), *Advanced Mathematical and Computational Tools in Metrology and Testing AMTCM’X*, World Scientific, Singapore, 2015, pp. 38–49.

Konstantin K. Semenov, Gennadi N. Solopchenko, and Vladik Kreinovich, “Inverse problems in theory and practice of measurements and metrology”, In: Franco

Pavese, Wolfram Bremser, Anna Chunovkina, Nicolas Fisher, and Alistair B. Forbes (eds.), *Advanced Mathematical and Computational Tools in Metrology and Testing AMTCM'X*, World Scientific, Singapore, 2015, pp. 330–339.

Konstantin K. Semenov, Gennady N. Solopchenko, and Vladik Kreinovich, “Fuzzy intervals as foundation of metrological support for computations with inaccurate data”, In: Franco Pavese, Wolfram Bremser, Anna Chunovkina, Nicolas Fisher, and Alistair B. Forbes (eds.), *Advanced Mathematical and Computational Tools in Metrology and Testing AMTCM'X*, World Scientific, Singapore, 2015, pp. 340–349.

Vladik Kreinovich, Hung T. Nguyen, and Songsak Sriboonchitta, “What If We Only Have Approximate Stochastic Dominance?”, In: Van-Nam Huynh, Vladik Kreinovich, Songsak Sriboonchitta, and Komsan Suriya (eds.), *Econometrics of Risk*, Springer Verlag, Berlin, Heidelberg, 2015, pp. 53–61.

Vladik Kreinovich, Hung T. Nguyen, and Rujira Ouncharoen, “From Mean and Median Income to the Most Adequate Way of Taking Inequality Into Account”, In: Van-Nam Huynh, Vladik Kreinovich, Songsak Sriboonchitta, and Komsan Suriya (eds.), *Econometrics of Risk*, Springer Verlag, Berlin, Heidelberg, 2015, pp. 63–73.

Ali Jalal-Kamali, M. Shahriar Hossain, and Vladik Kreinovich, “How to Understand Connections Based on Big Data: From Cliques to Flexible Granules”, In: Shyi-Ming Chen and Witold Pedrycz (eds.), *Information Granularity, Big Data, and Computational Intelligence*, Springer Verlag, Cham, Switzerland, 2015, pp. 63–87.

E. Cabral Balreira, Olga Kosheleva, and Vladik Kreinovich, “Algorithmics of Checking Whether a Mapping Is Injective, Surjective, and/or Bijective”, In: Martine Ceberio and Vladik Kreinovich (eds.), *Constraint Programming and Decision Making*, Springer Verlag, Berlin, Heidelberg, 2014, pp. 1–8.

Martine Ceberio, Olga Kosheleva, and Vladik Kreinovich, “Simplicity Is Worse Than Theft: A Constraint-Based Explanation of a Seemingly Counter-Intuitive Russian Saying”, In: Martine Ceberio and Vladik Kreinovich (eds.), *Constraint Programming and Decision Making*, Springer Verlag, Berlin, Heidelberg, 2014, pp. 9–14.

Martine Ceberio and Vladik Kreinovich, “Continuous If-Then Statements Are Computable”, In: Martine Ceberio and Vladik Kreinovich (eds.), *Constraint Programming and Decision Making*, Springer Verlag, Berlin, Heidelberg, 2014, pp. 15–18.

Aline Jaimes, Craig Tweedie, Tanja Magoc, Vladik Kreinovich, and Martine Ceberio, “Selecting the Best Location for a Meteorological Tower: A Case Study of Multi-Objective Constraint Optimization”, In: Martine Ceberio and Vladik Kreinovich (eds.), *Constraint Programming and Decision Making*, Springer Verlag, Berlin, Heidelberg, 2014, pp. 61–66.

Olga Kosheleva, Martine Ceberio, and Vladik Kreinovich, “Why Tensors?”, In: Martine Ceberio and Vladik Kreinovich (eds.), *Constraint Programming and Decision Making*, Springer Verlag, Berlin, Heidelberg, 2014, pp. 75–78.

Olga Kosheleva, Martine Ceberio, and Vladik Kreinovich, “Adding Constraints – A (Seemingly Counterintuitive but) Useful Heuristic in Solving Difficult Problems”, In: Martine Ceberio and Vladik Kreinovich (eds.), *Constraint Programming and Decision Making*, Springer Verlag, Berlin, Heidelberg, 2014, pp. 79–84.

Vladik Kreinovich, “Under Physics-Motivated Constraints, Generally-Non-Algorithmic Computational Problems Become Algorithmically Solvable”, In: Martine Ceberio and Vladik Kreinovich (eds.), *Constraint Programming and Decision Making*, Springer Verlag, Berlin, Heidelberg, 2014, pp. 85–90.

Vladik Kreinovich, Juan Ferret, and Martine Ceberio, “Constraint-Related Reinterpretation of Fundamental Physical Equations Can Serve as a Built-In Regularization” In: Martine Ceberio and Vladik Kreinovich (eds.), *Constraint Programming and Decision Making*, Springer Verlag, Berlin, Heidelberg, 2014, pp. 91–96.

Paden Portillo, Martine Ceberio, and Vladik Kreinovich, “Towards an Efficient Bisection of Ellipsoids”, In: Martine Ceberio and Vladik Kreinovich (eds.), *Constraint Programming and Decision Making*, Springer Verlag, Berlin, Heidelberg, 2014, pp. 137–142.

Uram Anibal Sosa Aguirre, Martine Ceberio, and Vladik Kreinovich, “Why Curvature in L-Curve: Combining Soft Constraints”, In: Martine Ceberio and Vladik Kreinovich (eds.), *Constraint Programming and Decision Making*, Springer Verlag, Berlin, Heidelberg, 2014, pp. 175–180.

Vladik Kreinovich, Hung T. Nguyen, and Songsak Sriboonchitta, “How to Detect Linear Dependence on the Copula Level?”, In: Van-Nam Huynh, Vladik Kreinovich, and Songsak Sriboonchitta (eds.), *Modeling Dependence in Econometrics*, Springer Verlag, Berlin, Heidelberg, 2014, pp. 65–82.

Songsak Sriboonchitta, Jianxu Liu, Vladik Kreinovich, and Hung T. Nguyen, “Vine Copulas as a Way to Describe and Analyze Multi-Variate Dependence in Econometrics: Computational Motivation and Comparison with Bayesian Networks and Fuzzy Approaches”, In: Van-Nam Huynh, Vladik Kreinovich, and Songsak Sriboonchitta (eds.), *Modeling Dependence in Econometrics*, Springer Verlag, Berlin, Heidelberg, 2014, pp. 169–187.

Songsak Sriboonchitta, Jianxu Liu, Vladik Kreinovich, and Hung T. Nguyen, “A Vine Copula Approach for Analyzing Financial Risk and Co-movement of the Indonesian, Philippine and Thailand Stock Markets”, In: Van-Nam Huynh, Vladik Kreinovich, and Songsak Sriboonchitta (eds.), *Modeling Dependence in Econometrics*, Springer Verlag, Berlin, Heidelberg, 2014, pp. 241–254.

Jianxu Liu, Songsak Sriboonchitta, Hung T. Nguyen and Vladik Kreinovich, “Studying Volatility and Dependency of Chinese Outbound Tourism Demand in Singapore, Malaysia, and Thailand: A Vine Copula Approach”, In: Van-Nam Huynh, Vladik Kreinovich, and Songsak Sriboonchitta (eds.), *Modeling Dependence in Econometrics*, Springer Verlag, Berlin, Heidelberg, 2014, pp. 255–272.

Vladik Kreinovich, “Decision Making under Interval Uncertainty (and beyond)”,

In: Peijun Guo and Witold Pedrycz (eds.), *Human-Centric Decision-Making Models for Social Sciences*, Springer Verlag, 2014, pp. 163–193.

Vladik Kreinovich, “In the Beginning Was the Word, and the Word was Fuzzy”, In: Rudolf Seising, Enric Trillas, Claudio Moraga, and Settimo Termini (eds.), *On Fuzziness. A Homage to Lotfi A. Zadeh*, Springer Verlag, Berlin, New York, 2013, Vol. 1, pp. 337–341.

Vladik Kreinovich, “Towards Optimizing Cloud Computing: An Example of Optimization under Uncertainty”, In: Samee U. Khan, Albert Y. Zomaya, and Lizhe Wang (eds.), *Scalable Computing and Communications: Theory and Practice*, John Wiley & Sons and IEEE Computer Society Press, 2013, pp. 613–627.

Vladik Kreinovich, Hung T. Nguyen, and Songsak Sriboonchitta, “Why Clayton and Gumbel Copulas: A Symmetry-Based Explanation”, In: Van-Nam Huynh, Vladik Kreinovich, Songsak Sriboonchitta, and Komsan Suriya (eds.), *Uncertainty Analysis in Econometrics, with Applications*, Springer Verlag, Berlin, Heidelberg, 2013, pp. 79–90.

Christian Servin, Martine Ceberio, Aline Jaimes, Craig Tweedie, and Vladik Kreinovich, “How to Describe and Propagate Uncertainty When Processing Time Series: Metrological and Computational Challenges, with Potential Applications to Environmental Studies”, In: Shyi-Ming Chen and Witold Pedrycz (eds.), *Time Series Analysis, Modeling and Applications: A Computational Intelligence Perspective*, Springer Verlag, 2013, pp. 279–299.

Vladik Kreinovich, “Towards Formalizing Non-Monotonic Reasoning in Physics: Logical Approach Based on Physical Induction and Its Relation to Kolmogorov Complexity”, in: Esra Erdem, Joohyung Lee, Yuliya Lierler, and David Pearce (eds.), *Correct Reasoning: Essays on Logic-Based AI in Honor of Vladimir Lifschitz*, Springer Lecture Notes on Computer Science, 2012, Vol. 7265, pp. 390–404.

Vladik Kreinovich and Olac Fuentes, “High-Concentration Chemical Computing Techniques for Solving Hard-To-Solve Problems, and Their Relation to Numerical Optimization, Neural Computing, Reasoning Under Uncertainty, and Freedom Of Choice”, In: Evgeny Katz (ed.), *Molecular and Supramolecular Information Processing: From Molecular Switches to Logical Systems*, Wiley-VCH, Weinheim, Germany, 2012, pp. 209–235.

Vladik Kreinovich, “All Kinds of Behavior are Possible in Chemical Kinetics: A Theorem and Its Potential Applications to Chemical Computing”, In: Evgeny Katz (ed.), *Molecular and Supramolecular Information Processing: From Molecular Switches to Logical Systems*, Wiley-VCH, Weinheim, Germany, 2012, pp. 237–258.

Olga Kosheleva and Vladik Kreinovich, “Can We Learn Algorithms from People Who Compute Fast”, In: Rudolf Seising and Veronica Sanz (eds.), *Soft Computing in Humanities and Social Sciences*, Springer Verlag, Heidelberg, 2011, pp. 267–275.

Vladik Kreinovich, “From Interval (Set) and Probabilistic Granules to Set-and-Probabilistic Granules of Higher Order”, In: Witold Pedrycz and Shyi-Ming Chen

(eds.), *Granular Computing and Intelligent Systems: Design with Information Granules of Higher Order and Higher Type*, Springer Verlag, Berlin, Heidelberg, 2011, pp. 1–16.

Vladik Kreinovich, Roberto Araiza, and Juan Ferret, “Analysis of Information and Computation in Physics Explains Cognitive Paradigms: from Full Cognition to Laplace Determinism to Statistical Determinism to Modern Approach”, In: Gordana Dodig-Crnkovic and Mark Burgin (eds.), *Information and Computation*, World Scientific, Singapore, 2011, pp. 203–223.

Vladik Kreinovich, “Cantor’s Paradise Regained: Constructive Mathematics from Brouwer to Kolmogorov to Gelfond”, In: Marcello Balduccini and Tran Cao Son (eds.), *Logic Programming, Knowledge Representation, and Nonmonotonic Reasoning: Essays in Honor of Michael Gelfond*, 2010, pp. 163–172; also in: Springer Lecture Notes in Artificial Intelligence, 2011, Vol. 6565, pp. 181–190.

Vladik Kreinovich, “Metritzation theorem for space-times: from Urysohn’s problem towards physically useful constructive mathematics”, In: Andreas Blass, Nachum Dershowitz, and Reisig (eds.), *Fields of Logic and Computation*, Lecture Notes in Computer Science, Vol. 6300, Springer-Verlag, Berlin, 2010, pp. 470–487.

Martine Ceberio, Vladik Kreinovich, Andrzej Pownuk, and Barnabas Bede, “From Interval Computations to Constraint-Related Set Computations: Towards Faster Estimation of Statistics and ODEs Under Interval, P-Box, and Fuzzy Uncertainty”, In: JinTao Yao (ed.), *Novel Developments in Granular Computing: Applications for Advanced Human Reasoning and Soft Computation*, IGI Global Publisher, 2010, pp. 131–147.

Vladik Kreinovich, Hung T. Nguyen, and Songsak Sriboonchitta, “Symmetries: A General Approach to Integrated Uncertainty Management”, In: Van-Nam Huynh et al. (eds.), *Integrated Uncertainty Management and Applications*, Springer-Verlag, 2010, Berlin, Heidelberg, Vol. AISC 68, pp. 141–152.

Vladik Kreinovich and Olga Kosheleva, “Towards Dynamical Systems Approach to Fuzzy Clustering”, In: Dmitri A. Viattchenin (ed.), *Developments in Fuzzy Clustering*, Vever Publ., Minsk, Belarus, 2009, pp. 10–35.

Tanja Magoč, François Modave, Martine Ceberio, and Vladik Kreinovich, “Computational Methods for Investment Portfolio: the Use of Fuzzy Measures and Constraint Programming for Risk Management”, In: Aboul-Ella Hassanien and Ajith Abraham (ed.), *Foundations of Computational Intelligence*, Springer-Verlag, 2009, Vol. 2, pp. 133–173.

Hung T. Nguyen, Vladik Kreinovich, J. Esteban Gamez, François Modave, and Olga Kosheleva, “Intermediate Degrees are Needed for the World to be Cognizable: Towards a New Justification for Fuzzy Logic Ideas”, In: Aboul-Ella Hassanien and Ajith Abraham (ed.), *Foundations of Computational Intelligence*, Springer-Verlag, 2009, Vol. 2, pp. 53–74.

Hung T. Nguyen, Vladik Kreinovich, François Modave, and Martine Ceberio, “Fuzzy Without Fuzzy: Why Fuzzy-Related Aggregation Techniques Are Often

Better Even in Situations Without True Fuzziness”, In: Aboul-Ella Hassanien and Ajith Abraham (ed.), *Foundations of Computational Intelligence*, Springer-Verlag, 2009, Vol. 2, pp. 27–51.

Vladik Kreinovich, “Interval Computations and Interval-Related Statistical Techniques: Tools for Estimating Uncertainty of the Results of Data Processing and Indirect Measurements”, In: Franco Pavese and Alistair B. Forbes (eds.), *Data Modeling for Metrology and Testing in Measurement Science*, Birkhauser-Springer, Boston, 2009, pp. 117–145.

Vladik Kreinovich, “Relation between interval computing and soft computing”, In: Chenyi Hu, R. Baker Kearfott, Andre de Korvin, and Vladik Kreinovich (eds.), *Knowledge Processing with Interval and Soft Computing*, Springer Verlag, London, 2008, pp. 75–97.

Hung T. Nguyen, Vladik Kreinovich, and Gang Xiang, “Random Fuzzy Sets”, in: Hsiao-Fan Wang (ed.), *Intelligent Data Analysis: Developing New Methodologies Through Pattern Discovery and Recovery*, IGI Global, Hershey, Pennsylvania, 2008, pp. 18–44.

Vladik Kreinovich, “Interval Computations as an Important Part of Granular Computing: An Introduction”, In: Witold Pedrycz, Andrzej Skowron, and Vladik Kreinovich (eds.), *Handbook on Granular Computing*, Wiley, Chichester, UK, 2008, pp. 3–31.

Vladik Kreinovich and Max Shpak, “Aggregation in Biological Systems: Computational Aspects”, in: Tomasz G. Smolinski, Mariofanna M. Milanova, and Aboul-Ella Hassanien (eds.), *Applications of Computational Intelligence in Biology: Current Trends and Open Problems*, Springer Verlag, Berlin-Heidelberg, 2008, pp. 281–305.

Hung T. Nguyen and Vladik Kreinovich, “Trade-Off Between Sample Size and Accuracy: Case of Static Measurements under Interval Uncertainty”, In: Van-Nam Huynh, Yoshiteru Nakamori, Hiroakira Ono, Jonathan Lawry, Vladik Kreinovich, and Hung T. Nguyen (eds.), *Interval/Probabilistic Uncertainty and Non-Classical Logics*, Springer-Verlag, Berlin-Heidelberg-New York, 2008, pp. 32–44.

Vladik Kreinovich and Gang Xiang, “Fast Algorithms for Computing Statistics under Interval Uncertainty: An Overview”, In: Van-Nam Huynh, Yoshiteru Nakamori, Hiroakira Ono, Jonathan Lawry, Vladik Kreinovich, and Hung T. Nguyen (eds.), *Interval/Probabilistic Uncertainty and Non-Classical Logics*, Springer-Verlag, Berlin-Heidelberg-New York, 2008, pp. 19–31.

Hung T. Nguyen, Olga Kosheleva, Vladik Kreinovich, and Scott Ferson, “Trade-Off Between Sample Size and Accuracy: Case of Dynamic Measurements under Interval Uncertainty”, In: Van-Nam Huynh, Yoshiteru Nakamori, Hiroakira Ono, Jonathan Lawry, Vladik Kreinovich, and Hung T. Nguyen (eds.), *Interval/Probabilistic Uncertainty and Non-Classical Logics*, Springer-Verlag, Berlin-Heidelberg-New York, 2008, pp. 45–56.

Canh Hao Nguyen, Tu Bao Ho, and Vladik Kreinovich, “Estimating Quality of Support Vector Machines Learning Under Probabilistic and Interval Uncertainty: Algorithms and Computational Complexity”, In: Van-Nam Huynh, Yoshiteru Nakamori, Hiroakira Ono, Jonathan Lawry, Vladik Kreinovich, and Hung T. Nguyen (eds.), *Interval/Probabilistic Uncertainty and Non-Classical Logics*, Springer-Verlag, Berlin-Heidelberg-New York, 2008, pp. 57–69.

Vladik Kreinovich and Max Shpak, “Decomposable Aggregability in Population Genetics and Evolutionary Computations: Algorithms and Computational Complexity”, In: Arpad Kelemen, Ajith Abraham, and Yulan Liang (Eds.), *Computational Intelligence in Medical Informatics*, Springer-Verlag, Berlin-Heidelberg, 2008, pp. 69–92.

Luc Longpré and Vladik Kreinovich, “How to Efficiently Process Uncertainty within a Cyberinfrastructure without Sacrificing Privacy and Confidentiality”, In: Nadia Nedjah, Ajith Abraham, and Luiza de Macedo Mourelle (Eds.), *Computational Intelligence in Information Assurance and Security*, Springer-Verlag, 2007, pp. 155–173.

Christodoulos A. Floudas and Vladik Kreinovich, “Towards Optimal Techniques for Solving Global Optimization Problems: Symmetry-Based Approach”, In: A. Torn and J. Zilinskas (eds.), *Models and Algorithms for Global Optimization*, Springer, New York, 2007, pp. 21–42.

C. G. Schiek, R. Araiza, J. M. Hurtado, A. A. Velasco, V. Kreinovich, and V. Sinyansky, “Images with Uncertainty: Efficient Algorithms for Shift, Rotation, Scaling, and Registration, and Their Applications to Geosciences”, In: Mike Nachtgeael, Dietrich Van der Weken, Etienne E. Kerre, and Wilfried Philips (eds.), *Soft Computing in Image Processing: Recent Advances*, Springer Verlag, 2007, pp. 35–64.

Hung T. Nguyen and Vladik Kreinovich, “Optimization and Decision Making under Interval and Fuzzy Uncertainty: Towards New Mathematical Foundations”, In: Cengiz Kahraman (ed.), *Fuzzy Applications in Industrial Engineering*, Springer Verlag, Berlin/Heidelberg, 2006, pp. 275–290.

Dmitriy Iourinskiy, Scott A. Starks, Vladik Kreinovich, and Stephen F. Smith, “Swarm intelligence: theoretical proof that empirical formulas are optimal”, In: A. Abraham, C. Grosan, V. Ramos (Eds.), *Stigmergic Optimization*, Springer-Verlag, Berlin – Heidelberg, 2006, pp. 281–295.

Vladik Kreinovich, “Statistical Data Processing under Interval Uncertainty: Algorithms and Computational Complexity”, In: Jonathan Lawry, Enrique Miranda, Alberto Bugarin, Shoumei Li, Maria Angeles Gil, Przemyslaw Grzegorzewski, and Olgierd Hryniewicz (eds.), *Soft Methods for Integrated Uncertainty Modeling*, Springer-Verlag, 2006, pp. 11–26.

G. Randy Keller, T. G. Hildenbrand, R. Kucks, M. Webring, Allen Briesacher, Kristine Rujawitz, A. M. Hittleman, D. R. Roman, Daniel Winester, R. Aldouri, John Seeley, Jorge Rasillo, Roberto Torres, William J. Hinze, Ann Gates, Vladik

Kreinovich, and Leonardo Salayandia, “A community effort to construct a gravity database for the United States and an associated Web portal”, In: A. Krishna Sinha (ed.), *Geoinformatics: Data to Knowledge*, Geological Society of America Publ., Boulder, Colorado, 2006, pp. 21–34.

Jan B. Beck, Vladik Kreinovich, and Berlin Wu, “Interval-Valued and Fuzzy-Valued Random Variables: From Computing Sample Variances to Computing Sample Covariances”, In: M. Lopez, M. A. Gil, P. Grzegorzewski, O. Hryniewicz, and J. Lawry (eds.), *Soft Methodology and Random Information Systems*, Springer-Verlag, 2004, pp. 85–92.

Götz Alefeld, Vladik Kreinovich, and Günter Mayer, “On Symmetric Solution Sets”, In: J. Herzberger (ed.), *Inclusion Methods for Nonlinear Problems*, Springer-Verlag, Vienna, New York, 2003, pp. 1–23.

David D. Coblenz, Vladik Kreinovich, Brian S. Penn, and Scott A. Starks, “Towards Reliable Sub-Division of Geological Areas: Interval Approach”, In: L. Reznik and V. Kreinovich (eds.), *Soft Computing in Measurements and Information Acquisition*, Springer-Verlag, Berlin-Heidelberg, 2003, pp. 223–233.

Hung T. Nguyen, Vladik Kreinovich, Gennady N. Solopchenko, and Chin-Wang Tao, “Why Two Sigma? A Theoretical Justification”, In: L. Reznik and V. Kreinovich (eds.), *Soft Computing in Measurements and Information Acquisition*, Springer-Verlag, Berlin-Heidelberg, 2003, pp. 10–22.

Hung T. Nguyen and Vladik Kreinovich, “On Efficient Representation of Expert Knowledge by Fuzzy Logic: Towards an Optimal Combination of Granularity and Higher-Order Approaches”, In: Ajith Abraham, Lakhmi Jain, and Janusz Kacprzyk (eds.), *Recent Advances in Intelligent Paradigms and Applications*, Springer-Verlag, 2002, pp. 107–132.

Carlos Ferregut, Roberto A. Osegueda, Yohans Mendoza, Vladik Kreinovich, and Timothy J. Ross, “Aircraft Integrity and Reliability”, In: Jane Booker, Jerry Parkinson, and Timothy J. Ross (eds.), *Combined Fuzzy Logic and Probability Applications*, SIAM, Philadelphia, 2002, pp. 219–242.

G. Alefeld, V. Kreinovich, and G. Mayer, “Modification of the Oettli-Prager theorem with applications to the algebraic eigenvalue problem”, In: G. Alefeld, J. Rohn, S. Rump, and T. Yamamoto (eds.), *Symbolic Algebraic Methods and Verification Methods – Theory and Application*, Springer-Verlag, Wien, 2001, pp. 11–20.

Raúl Trejo and Vladik Kreinovich, “Error Estimations for Indirect Measurements: Randomized vs. Deterministic Algorithms For ‘Black-Box’ Programs”, Sanguthevar Rajasekaran, Panos Pardalos, John Reif, and Jose Rolim (eds.), *Handbook on Randomized Computing*, Kluwer, 2001, pp. 673–729.

Scott Ferson, Lev Ginzburg, Vladik Kreinovich, and Harry Schulte, “Interval Computations as a Particular Case of a General Scheme Involving Classes of Probability Distributions”, In: Jürgen Wolff von Gudenberg and Walter Krämer (eds.), *Scientific Computing, Validated Numerics, Interval Methods*, Kluwer, Dordrecht, 2001, pp. 355–366.

Hung T. Nguyen, Nadipuram R. Prasad, Vladik Kreinovich, and Habib Gassoumi, “Some Practical Applications of Soft Computing and Data Mining”, In: A. Kandel, H. Bunke, and M. Last (eds.), *Data Mining and Computational Intelligence*, Springer-Verlag, Berlin, 2001, pp. 273–307.

Stephen Gibson, Vladik Kreinovich, Luc Longpré, Brian Penn, and Scott A. Starks, “Intelligent Mining in Image Databases, With Applications to Satellite Imaging and to Web Search”, In: A. Kandel, H. Bunke, and M. Last (eds.), *Data Mining and Computational Intelligence*, Springer-Verlag, Berlin, 2001, pp. 309–336.

Gennadij N. Solopchenko, Vladik Kreinovich, and Leonid Reznik, “Development of mathematical structure of the modern measurement science”, In: Komyo Kariya and Ludwik Finkelstein (eds.), *Measurement Science: A Discussion*, Ohmsha/IOS Press, Tokyo, 2000, pp. 23–35.

Vladik Kreinovich, “Beyond Interval Systems: What Is Feasible and What Is Algorithmically Solvable?”, In: Panos M. Pardalos (ed.), *Approximation and Complexity in Numerical Optimization: Continuous and Discrete Problems*, Kluwer, Dordrecht, 2000, pp. 364–379.

Núria Mata and Vladik Kreinovich, “NP-Hardness In Geometric Construction Problems With One Interval Parameter”, In: Josep Vehi and Miquel A. Sainz (eds.), *Applications of Interval Analysis to Systems and Control*, University of Girona, Spain, 1999, pp. 101–114.

Hung T. Nguyen, Vladik Kreinovich, Vladimir I. Gorodetski, Vyacheslav M. Nesterov, and Alexandre L. Touloupiev, “Applications of Interval-Valued Degrees of Belief: A Survey”, In: Alexandre Touloupiev (ed.), *Information Technologies and Intellectual Methods*, Vol. 3 (IT&IM’3), St. Petersburg Institute for Information and Automation of Russian Academy of Sciences (SPIIRAS), 1999, pp. 6–61 (in Russian).

Vladik Kreinovich, Brian Penn, and Scott Starks, “From Expert Words Directly to Numerical Simulations: Group-Theoretic Approach to Computing with Words in Information/Intelligent Systems”, In: Lotfi A. Zadeh and Janusz Kacprzyk (eds.), *Computing with Words in Information/Intelligent Systems*, Springer-Verlag, Berlin, 1999, pp. 495–517.

Daniel E. Cooke, Vladik Kreinovich, and Luc Longpré, “Which algorithms are feasible? MaxEnt approach”, In: Gary J. Erickson, Joshua T. Rychert, and C. Ray Smith (eds.), *Maximum Entropy and Bayesian Methods*, Kluwer, Dordrecht, 1998, pp. 24–32.

Dirk Fox, Martin Schmidt, Misha Koshelev, Vladik Kreinovich, Luc Longpré, and Jeff Kuhn, “We must choose the simplest physical theory: Levin-Li-Vitányi theorem and its potential physical applications”, In: Gary J. Erickson, Joshua T. Rychert, and C. Ray Smith (eds.), *Maximum Entropy and Bayesian Methods*, Kluwer, Dordrecht, 1998, pp. 238–251.

Scott A. Starks and V. Kreinovich, “Environmentally-oriented processing of multispectral satellite images: new challenges for Bayesian methods”, In: Gary J. Erick-

son, Joshua T. Rychert, and C. Ray Smith (eds.), *Maximum Entropy and Bayesian Methods*, Kluwer, Dordrecht, 1998, pp. 271–276.

Roberto Osegueda, Carlos Ferregut, Mary J. George, Jose M. Gutierrez, and Vladik Kreinovich, “Maximum entropy approach to optimal sensor placement for aerospace non-destructive testing”, In: Gary J. Erickson, Joshua T. Rychert, and C. Ray Smith (eds.), *Maximum Entropy and Bayesian Methods*, Kluwer, Dordrecht, 1998, pp. 277–289.

Hung T. Nguyen and Vladik Kreinovich, “Multi-criteria optimization – an important foundation of fuzzy system design”, In: Leonid Reznik, Vladimir Dimitrov, and Janusz Kacprzyk, *Fuzzy system design: social and engineering applications*, Physica Verlag, Heidelberg, 1998, pp. 24–35.

Vladik Kreinovich, George C. Mouzouris, and Hung T. Nguyen, “Fuzzy rule based modeling as a universal approximation tool”, In: H. T. Nguyen and M. Sugeno (eds.), *Fuzzy Systems: Modeling and Control*, Kluwer, Boston, MA, 1998, pp. 135–195.

Hung T. Nguyen and Vladik Kreinovich, “Methodology of fuzzy control: an introduction”, In: H. T. Nguyen and M. Sugeno (eds.), *Fuzzy Systems: Modeling and Control*, Kluwer, Boston, MA, 1998, pp. 19–62.

Hung T. Nguyen and Vladik Kreinovich, “Kolmogorov’s Theorem and its impact on soft computing”, In: Ronald R. Yager and Janusz Kacprzyk, *The Ordered Weighted Averaging Operators: Theory and Applications*, Kluwer, Boston, MA, 1997, pp. 3–17.

Vladik Kreinovich, “S. Maslov’s Iterative Method: 15 Years Later (Freedom of Choice, Neural Networks, Numerical Optimization, Uncertainty Reasoning, and Chemical Computing)”, In: V. Kreinovich and G. Mints (eds.), *Problems of reducing the exhaustive search*, American Mathematical Society, Providence, RI, 1997, pp. 175–189.

Vladik Kreinovich, “Random sets unify, explain, and aid known uncertainty methods in expert systems”, in John Goutsias, Ronald P.S. Mahler, and Hung T. Nguyen (eds.), *Random Sets: Theory and Applications*, Springer-Verlag, N.Y., 1997, pp. 321–345.

Benjamin C. Flores, Vladik Kreinovich, and *Roberto Vasquez, “Signal design for radar imaging in radar astronomy: genetic optimization”, In: Dipankar Dasgupta and Zbigniew Michalewicz (eds.), *Evolutionary Algorithms in Engineering Applications*, Springer-Verlag, Berlin-Heidelberg, 1997, pp. 406–423.

Vladik Kreinovich, Anatoly Lakeyev, and Jiří Rohn, “Computational Complexity of Interval Algebraic Problems: Some Are Feasible And Some Are Computationally Intractable – A Survey”, In: Goetz Alefeld, Andreas Frommer, and Bruno Lang (eds.), *Scientific Computing and Validated Numerics*, Akademie-Verlag, Berlin, 1996, pp. 293–306.

Goetz Alefeld, Vladik Kreinovich, and Guenther Mayer, “Symmetric Linear Systems with Perturbed Input Data”, In: Götz Alefeld and Jürgen Herzberger (eds.),

Numerical Methods and Error Bounds. Proceedings of the IMACS-GAMM International Symposium on Numerical Methods and Error Bounds, Oldenburg, Germany, July 9–12, 1995, Akademie Verlag, Berlin, 1996, pp. 16–22.

Vladik Kreinovich, Hung T. Nguyen, and Elbert A. Walker, “Maximum entropy (MaxEnt) method in expert systems and intelligent control: new possibilities and limitations”, In: Ken M. Hanson and Richard N. Silver, Eds., *Maximum Entropy and Bayesian Methods*, Kluwer Academic Publishers, Dordrecht, 1996, pp. 93–100.

Götz Alefeld, Günter Mayer, and Vladik Kreinovich, “The shape of the symmetric solution set”, In: R. B. Kearfott et al (eds.), *Applications of Interval Computations*, Kluwer, Dordrecht, 1996, pp. 61–79.

R. Baker Kearfott and Vladik Kreinovich, “Applications of interval computations: an introduction”, In: R. B. Kearfott et al (eds.), *Applications of Interval Computations*, Kluwer, Dordrecht, 1996, pp. 1–22.

Hung T. Nguyen and Vladik Kreinovich, “Nested Intervals and Sets: Concepts, Relations to Fuzzy Sets, and Applications”, In: R. B. Kearfott et al (eds.), *Applications of Interval Computations*, Kluwer, Dordrecht, 1996, pp. 245–290.

Luis Mateus Rocha, Vladik Kreinovich, and R. Baker Kearfott, “Computing uncertainty in interval based sets”, In: R. B. Kearfott et al (eds.), *Applications of Interval Computations*, Kluwer, Dordrecht, 1996, pp. 337–380.

Vladik Kreinovich, Hung T. Nguyen, Ongard Sirisaengtaksin, “On approximation of controls in distributed systems by fuzzy controllers”, In: B. Bouchon-Meunier, R. R. Yager, and L. A. Zadeh (eds.), *Fuzzy Logic and Soft Computing*, World Scientific, 1995, pp. 137–145.

Michael H. Smith, Vladik Kreinovich. “Optimal strategy of switching reasoning methods in fuzzy control”, Chapter 6 in H. T. Nguyen, M. Sugeno, R. Tong, and R. Yager (eds.), *Theoretical aspects of fuzzy control*, J. Wiley, N.Y., 1995, pp. 117–146.

Arthur Ramer and Vladik Kreinovich, “Information complexity and fuzzy control”, Chapter 4 in: Abraham Kandel and Gideon Langholtz (Eds.), *Fuzzy Control Systems*, CRC Press, Boca Raton, FL, 1994, pp. 75–97.

Bassam Chokr and Vladik Kreinovich. “How far are we from the complete knowledge: complexity of knowledge acquisition in Dempster-Shafer approach.” In R. R. Yager, J. Kacprzyk, and M. Pedrizzi (Eds.), *Advances in the Dempster-Shafer Theory of Evidence*, Wiley, N.Y., 1994, pp. 555–576.

Vladik Kreinovich, Andrew Bernat, Walter Borrett, Yvonne Mariscal, and Elsa Villa. “Monte-Carlo methods make Dempster-Shafer formalism feasible.” In R. R. Yager, J. Kacprzyk, and M. Pedrizzi (Eds.), *Advances in the Dempster-Shafer Theory of Evidence*, Wiley, N.Y., 1994, pp. 175–191.

Vladik Kreinovich. “Group-theoretic approach to intractable problems,” *Lecture Notes in Computer Science*, Springer-Verlag, Berlin, Vol. 417, 1990, pp. 112–121.

Vladik Kreinovich. "Knowledge representation for measurable quantities: group-theoretic approach," *Mathematical Methods of Algorithms Design and Analysis*, Leningrad, Academy of Sciences, 1990, pp. 64–72 (in Russian).

Vitaly Kozlenko, Vladik Kreinovich, and M. G. Mirimanishvili. "An optimal method of describing expert information," *Applied Problems of Systems Analysis, Proceedings of the Georgian Polytechnical Institute*, Tbilisi, 1988, No. 8 (337), pp. 64–67 (in Russian).

Vitaly Kozlenko, Vladik Kreinovich, and V. P. Popkov. "Optimal prognostic methods for characteristics of complex systems," *Principles of Creating of Automatized Workplaces for Control and the Experience of Their Functioning, Proceedings of the Ukrainian Academy of Sciences, Institute of Industrial Economics*, Donetsk, 1988, pp.50–54 (in Russian).

Vladik Kreinovich. "Semantics of S. Yu. Maslov's iterative method," *Problems of Cybernetics*, Moscow, 1987, Vol. 131, pp. 30–62 (in Russian); English translation in: Vladik Kreinovich and Grigory Mints (eds.), *Problems of reducing the exhaustive search*, American Mathematical Society, Providence, RI, 1997, pp. 23–51.

Andrei I. Gerasimov and Vladik Kreinovich. "On the foundations of scaling theory," *Leningrad Technical University and National Research Institute for Scientific and Technical Information (VINITI)*, 1989, Publication No. 7661-B89, 51 pp. (in Russian).

Vladik Kreinovich. "Knowledge representation for measurable quantities: group-theoretic approach," *Theoretical Problems of Electrical Measuring Techniques, Proceedings of the National Institute of Electrical Measuring Instruments*, Leningrad, 1989, pp. 14–22 (in Russian).

Andrei I. Gerasimov and Vladik Kreinovich. "Piecewise- fractionally-linear approximation," *Leningrad Polytechnical University and National Research Institute for Scientific and Technical Information (VINITI)*, 1988, 15 pp. (in Russian)

Andrei I. Gerasimov and Vladik Kreinovich. "On the problem of optimal approximation choice for metrological characteristics," *Leningrad Polytechnical University and National Research Institute for Scientific and Technical Information (VINITI)*, 1988, 13 pp. (in Russian).

Vladik Kreinovich and Dmitri Pereverzev. "Choice of the parameters of test signals for determining amplitude-frequency characteristics of measuring transformers," *Design of the Electrical Measuring Instruments, Proceedings of the National Institute of Electrical Measuring Instruments*, Leningrad, 1988, pp. 49–57 (in Russian).

Valery D. Mazin and Vladik Kreinovich. "An explanation of the universal character of the transformation functions $y = (a \ln x + b) / (c \ln x + d)$," *Leningrad Polytechnical Institute and National Research Institute for Scientific and Technical Information (VINITI)*, 1988, 6 pp. (in Russian).

Valery D. Mazin and Vladik Kreinovich. "An important property of fractional-linear transformation functions," *Leningrad Polytechnical Institute and National*

Research Institute for Scientific and Technical Information (VINITI), 1988, 13 pp. (in Russian).

Gennady N. Solopchenko, Vladik Kreinovich, and Vera P. Pytchenko, “Metrological standardization of the software components used of digital processing of the measurement information.” The Instruction (normative document), *USSR National Institute of Electrical Measuring Instruments*, Leningrad, 1987 (in Russian).

Andrei M. Finkelstein, Vladik Kreinovich, and Roman R. Zapatrin. “Fundamental physical equations uniquely determined by their symmetry groups,” *Lecture Notes in Mathematics*, Springer-Verlag, Berlin-Heidelberg-N.Y., Vol. 1214, 1986, pp. 159–170.

Gennady N. Solopchenko and Vladik Kreinovich. “Methods allowing to take a priori information into consideration when correcting measurement errors in dynamical regime,” *Investigations in Measurement Error Estimations, Proceedings of the National Mendeleev Metrological Institute*, Leningrad, 1986, pp. 27–31 (in Russian).

Igor N. Krotkov, Vladik Kreinovich and Valery D. Mazin. “Methodology of designing measuring systems, using fractionally linear transformations,” *Measuring Systems. Theory and Applications. Proceedings of the Novosibirsk Electrical Engineering Institute*, 1986, pp. 5–14 (in Russian).

Vladik Kreinovich and Leonid K. Reznik. “Methods and models of formalizing a priori information (on the example of processing measurements results),” *Analysis and Formalization of Computer Experiments, Proceedings of the Mendeleev Metrology Institute*, 1986, pp. 37–41 (in Russian).

Vitaly Kozlenko and Vladik Kreinovich. “Algorithms for integration, extrapolation and equations solving, that are optimal in the average,” *Logical Methods of Constructing Efficient Algorithms*, Kalinin, Kalinin University, 1986, pp. 52–58 (in Russian).

Vitaly Kozlenko and Vladik Kreinovich. “Methods of optimal formation of the applied programs package on the base of the given package,” *Leningrad scientific and technical information center*, Leningrad, 1986, 4 pp. (edition No. 833, in Russian).

Vitaly Kozlenko and Vladik Kreinovich. “Methods of optimal formation of the educating programs complex on the base of a given non-optimal complex,” *Leningrad Scientific and Technical Information Center*, Leningrad, Technical report No. 834, 1986, 4 pp. (in Russian).

Evgeny Koltik, Vladimir G. Dmitriev, Nina A. Zheludeva, and Vladik Kreinovich. “An optimal method for estimating a random error component,” *Investigations in Error Estimation*, Proceedings of the Mendeleev Metrological Institute, Leningrad, 1986, pp. 36–41 (in Russian).

Inna S. Kirillova and Vladik Kreinovich. “Approximation of experimental data in case noises in independent and dependent variables are of different nature,”

Design of Electrical Measuring Instruments, Proceedings of the National Institute of Electrical Measuring Instruments (VNIIEP), 1985, pp. 101–107 (in Russian).

Inna S. Kirillova and Vladik Kreinovich. “Methods allowing to obtain an upper estimates of metrological characteristics on the whole measurements scale,” *Investigations in Metrological Problems of Measuring Systems and Measuring Devices Used in Systems, Proceedings of the National Institute of Measuring and Control Systems*, Lvov, 1985, pp. 68–74 (in Russian).

Vladik Kreinovich and Gennady N. Solopchenko. “Necessary and sufficient conditions for correctness of inverse problems in measuring techniques,” *Investigations in Methodology of Metrological Maintenance of Measuring Techniques, Proceedings of the National Institute of Measuring and Control Systems*, Lvov, 1984, pp. 53–56 (in Russian).

Inna S. Kirillova and Vladik Kreinovich. “Choosing l^p method of calculating the shift parameter, on the basis of the applicability criterion,” *Metrological Maintenance of Electrical Measuring Instruments*, Proceedings of the National Institute of Electrical Measuring Instruments (VNIIEP), Leningrad, 1984, pp. 91–97 (in Russian).

Vladik Kreinovich and Inna S. Shadenkova. “Using confluent methods when estimating multidimensional influence function,” *Design of Electrical Measuring Instruments, Proceedings of the National Institute of Electrical Measuring Instruments*, Leningrad, 1983, pp. 114–119 (in Russian).

Vladik Kreinovich and Andrei M. Finkelstein. “Are scientific revolutions inevitable: pro and contra,” *Methodological Problems of the Interaction between Social, Natural and Technical Sciences*, Nauka Publishers, Moscow, 1981, pp. 240–254 (in Russian).

Olga M. Kosheleva and Vladik Kreinovich. “What can physics give to constructive mathematics,” *Mathematical Logic and Mathematical Linguistics*, Kalinin, 1981, pp. 117–128 (in Russian).

Vladik Kreinovich. “Categories of space-time models”. A Ph.D. dissertation. *Novosibirsk, Soviet Academy of Sciences, Siberian Branch, Institute of Mathematics*, 1979 (in Russian).

Research Journal Articles

Rafik A. Aliev and Vladik Kreinovich, “Z-Numbers and Type-2 Fuzzy Sets: A Representation Result”, *Intelligent Automation and Soft Computing*, 2017, Vol. 23, No. 4, to appear.

Songsak Sriboonchitta and Vladik Kreinovich, “Why are FGM copulas successful: a simple explanation”, *Advances in Fuzzy Systems*, to appear.

Pedro Barragan Olague and Vladik Kreinovich, “A Symmetry-Based Explanation for an Empirical Model of Fatigue Damage of Composite Materials”, *Journal of Uncertain Systems*, to appear.

Martine Ceberio and Vladik Kreinovich, “Constraint Problems: Computability Is Equivalent to Continuity”, *International Journal of Intelligent Technologies and Applied Statistics IJITAS*, to appear.

Andrzej Pownuk and Vladik Kreinovich, “Why Mixture of Probability Distributions?”, *International Journal of Intelligent Technologies and Applied Statistics IJITAS*, to appear.

Andrzej Pownuk, Olga Kosheleva, and Vladik Kreinovich, “Towards Decision Making under General Uncertainty”, *Mathematical Structures and Modeling*, 2017, Vol. 44, to appear.

Francisco Zapata, Olga Kosheleva, and Vladik Kreinovich, “Why Stable Teams Are More Efficient in Education”, *Mathematical Structures and Modeling*, 2017, Vol. 44, to appear.

Andrzej Pownuk and Vladik Kreinovich, “Why linear interpolation?”, *Mathematical Structures and Modeling*, 2017, Vol. 43, to appear.

Olga Kosheleva and Vladik Kreinovich, “Derivation of Gross-Pitaevskii Version of Nonlinear Schroedinger Equation from Scale Invariance”, *Mathematical Structures and Modeling*, 2017, Vol. 43, to appear.

Olga Kosheleva and Vladik Kreinovich, “Experimentally Observed Dark Matter Confinement Clarifies a Discrepancy in Estimating the Universe’s Expansion Speed”, *Mathematical Structures and Modeling*, 2017, Vol. 43, to appear.

Christian Servin, Olga Kosheleva, and Vladik Kreinovich, “In Fuzzy Decision Making, General Fuzzy Sets Can Be Replaced by Fuzzy Numbers”, *Journal of Uncertain Systems*, to appear.

José Guadalupe Flores Muñiz, Vyacheslav V. Kalashnikov, Vladik Kreinovich, and Nataliya Kalashnykova, “Gaussian and Cauchy Functions in the Filled Function Method – Why and What Next: On the Example of Optimizing Road Tolls”, *Acta Politechnica Hungarica*, to appear.

Justin Parra, Olac Fuentes, Elizabeth Anthony, and Vladik Kreinovich, “Use of Machine Learning to Analyze and – Hopefully – Predict Volcano Activity”, *Acta Politechnica Hungarica*, to appear.

Vyacheslav Kalashnikov, Vladik Kreinovich, José G. Flores-Muñiz, and Nataliya I. Kalashnykova, “Structure of Filled Functions: Why Gaussian and Cauchy Templates Are Most Efficient”, *International Journal of Combinatorial Optimization and Informatics*, to appear.

Francisco Zapata, Olga Kosheleva, and Vladik Kreinovich, “Grading that Takes into Account the Need to Learn from Mistakes”, *Journal of Uncertain Systems*, to appear.

Martine Ceberio and Vladik Kreinovich, “A Modification of Backpropagation Enables Neural Networks to Learn Preferences”, *Journal of Uncertain Systems*, to appear.

Andrzej Pownuk and Vladik Kreinovich, “Towards Decision Making under Interval Uncertainty”, *Journal of Uncertain Systems*, to appear.

Bui Cong Cuong, Vladik Kreinovich, Le Hoang Son, and Nilanjan Dey, “Fuzzy Pareto Solution in multi-criteria group decision making with intuitionistic linguistic preference relation”, *International Journal of Fuzzy System Applications*, to appear.

Boris Kovalerchuk and Vladik Kreinovich, “Concepts of solutions of uncertain equations with intervals, probabilities and fuzzy sets for applied tasks”, *Granular Computing*, to appear.

Lukáš Havrlant and Vladik Kreinovich, “A Simple Probabilistic Explanation of Term Frequency-Inverse Document Frequency (tf-idf) Heuristic (and Variations Motivated by This Explanation)”, *International Journal of General Systems*, to appear.

Rujira Ouncharoen, Vladik Kreinovich, and Hung T. Nguyen, “Why Lattice-Valued Fuzzy Values? A Mathematical Justification”, *Journal of Intelligent and Fuzzy Systems*, to appear.

Anthony Welte, Luc Jaulin, Martine Ceberio, and Vladik Kreinovich, “Avoiding Fake Boundaries in Set Interval Computing”, *Journal of Uncertain Systems*, 2017, Vol. 11, No. 2, pp. 137–148.

*Anthony Welte, Luc Jaulin, Martine Ceberio, and Vladik Kreinovich, “Computability of the Avoidance Set and of the Set-Valued Identification Problem” *Journal of Uncertain Systems*, 2017, Vol. 11, No. 2, pp. 129–136.

Vladik Kreinovich, “A Simplified Derivation of Confidence Regions Based on Inferential Models”, *Journal of Uncertain Systems*, 2017, Vol. 11, No. 2, pp. 125–128.

Olga Kosheleva and Vladik Kreinovich, “From Tertullian’s Credo Quia Absurdum to Bohr’s Crazy Theories: A Rational Explanation of a Seemingly Irrational Idea”, *Journal of Uncertain Systems*, 2017, Vol. 11, No. 2, pp. 122–124.

Stephen Escarzaga, Craig Tweedie, and Vladik Kreinovich, “How to Predict Nesting Sites?”, *Journal of Uncertain Systems*, 2017, Vol. 11, No. 2, pp. 119–121.

Anjon Basak, Christopher Kiekintveld, and Vladik Kreinovich, “Towards Selecting the Best Abstraction for a Patrolling Game”, *Journal of Uncertain Systems*, 2017, Vol. 11, No. 2, pp. 104–118.

Vladik Kreinovich, “Interval Uncertainty as the Basis for a General Description of Uncertainty: A Position Paper”, *International Journal of Innovative Management, Information & Production (IJIMIP)*, 2017, Vol. 10, No. 2, pp. 1–5.

Olga Kosheleva and Vladik Kreinovich, “A Simple Geometric Explanation of Occam’s Razor”, *Geombinatorics*, 2017, Vol. 27, No. 1, pp. 15–19.

Olga Kosheleva and Vladik Kreinovich, “Why West-to-East Jetlag Is More Severe: A Simple Qualitative Explanation”, *Journal of Innovative Technology and Education*, 2017, Vol. 4, No. 1, pp. 117–120.

Gael Kermarrec, Steffen Schoen, and Vladik Kreinovich, “Possible Explanation of Empirical Values of the Matérn Smoothness Parameter for the Temporal Covariance of GPS Measurements”, *Applied Mathematical Sciences*, 2017, Vol. 11, No. 35, pp. 1733–1737.

Francisco Zapata, Olga Kosheleva, and Vladik Kreinovich, “In Education, Delayed Feedback Is Often More Efficient Than Immediate Feedback: A Geometric Explanation”, *Journal of Innovative Technology and Education*, 2017, Vol. 4, No. 1, pp. 109–112.

Francisco Zapata, Olga Kosheleva, and Vladik Kreinovich, “Are Permanent or Temporary Teams More Efficient: A Possible Explanation of the Empirical Data”, *Journal of Innovative Technology and Education*, 2017, Vol. 4, No. 1, pp. 113–116.

Pedro Barragan Olagues and Vladik Kreinovich, “Why growth of cancerous tumors is Gompertzian: a symmetry-based explanation”, *Cybernetics and Physics*, 2017, Vol. 6, No. 1, pp. 13–18.

Vladik Kreinovich, “Why some physicists are excited about the undecidability of the spectral gap problem and why should we”, *Bulletin of the European Association for Theoretical Computer Science (EATCS)*, 2017, Vol. 122.

Pedro A. Barragan Olague and Vladik Kreinovich, “Why superellipsoids: a probability-based explanation”, *Reliable Computing*, 2017, Vol. 25, pp. 1–7.

Mahdokht Michelle Afravi and Vladik Kreinovich, “Decision making under interval uncertainty as a natural example of a quandle”, *Reliable Computing*, 2017, Vol. 25, pp. 8–14.

Christian Servin and Vladik Kreinovich, “No Idea Is a Bad Idea: A Theoretical Explanation”, *Journal of Innovative Technology and Education*, 2017, Vol. 4, No. 1, pp. 97–102.

Olga Kosheleva and Vladik Kreinovich, “Negotiations vs. Confrontation: A Possible Explanation of the Empirical Results”, *Journal of Innovative Technology and Education*, 2017, Vol. 4, No. 1, pp. 77–81.

Olga Kosheleva and Vladik Kreinovich, “What Is the Best Way to Add Large Number of Integers: Number-by-Number As Computers Do Or Lowest-Digits-Than-Next-Digits-Etc As We Humans Do?”, *Mathematical Structures and Modeling*, 2017, Vol. 42, pp. 115–118.

Gerardo Muela, Christian Servin, and Vladik Kreinovich, “How to Make Machine Learning Robust Against Adversarial Inputs”, *Mathematical Structures and Modeling*, 2017, Vol. 42, pp. 127–130.

Vladik Kreinovich and Olga Kosheleva, “The Range of a Continuous Functional Under Set-Valued Uncertainty Is Always an Interval”, *Reliable Computing*, 2017, Vol. 24, pp. 27–30.

Olga Kosheleva and Vladik Kreinovich, “Geometric symmetries partially explain

why some paleolithic signs are more frequent”, *Geoinformatics*, 2017, Vol. 26, No. 4, pp. 141–148.

Olga Kosheleva and Vladik Kreinovich, “Contradictions do not necessarily make a theory inconsistent”, *Journal of Innovative Technology and Education*, 2017, Vol. 4, No. 1, pp. 59–64.

Olga Kosheleva and Vladik Kreinovich, “Physical Induction Explains Why Over-Realistic Animation Sometimes Feels Creepy”, *Journal of Innovative Technology and Education*, 2017, Vol. 4, No. 1, pp. 65–70.

Vladik Kreinovich, “Towards Predictive Statistics: A Pedagogical Explanation”, *Journal of Innovative Technology and Education*, 2017, Vol. 4, No. 1, pp. 71–75.

Vladik Kreinovich and Arnold Neumaier, “For piecewise smooth signals, l^1 method is the best among l^p : an interval-based justification of an empirical fact”, *Journal of Computational Technologies*, 2017, Vol. 22, No. 2, pp. 50–58.

Vladik Kreinovich, “Decision making under interval (and more general) uncertainty: monetary vs. utility approaches”, *Journal of Computational Technologies*, 2017, Vol. 22, No. 2, pp. 37–49.

Olga Kosheleva and Vladik Kreinovich, “Yes- and No-Gestures Explained by Symmetry”, *Mathematical Structures and Modeling*, 2017, Vol. 41, pp. 127–129.

Olga Kosheleva and Vladik Kreinovich, “When Invading, Cancer Cell Do Not Divide: A Geometric (Symmetry-Based) Explanation of an Empirical Observation”, *Mathematical Structures and Modeling*, 2017, Vol. 41, pp. 122–126.

Olga Kosheleva and Vladik Kreinovich, “Why Most Bright Stars Are Binary But Most Dim Stars Are Single: A Simple Qualitative Explanation”, *Mathematical Structures and Modeling*, 2017, Vol. 41, pp. 118–121.

Francisco Zapata and Vladik Kreinovich, “Why Pairwise Testing Works So Well: A Possible Theoretical Explanation of an Empirical Phenomenon”, *Mathematical Structures and Modeling*, 2017, Vol. 41, pp. 130–134.

Vladik Kreinovich, Olga Kosheleva, Andrzej Pownuk, and Rodrigo Romero, “How to take into account model inaccuracy when estimating the uncertainty of the result of data processing”, *ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part B: Mechanical Engineering*, 2017, Vol. 3, No. 1, Paper No. 011002.

Olga Kosheleva and Vladik Kreinovich, “Why Product “And”-Operation Is Often Efficient: One More Argument”, *Journal of Innovative Technology and Education*, 2017, Vol. 4, No. 1, pp. 25–28.

Pedro Barragan Olague, Olga Kosheleva, and Vladik Kreinovich, “Why RSA? A Pedagogical Comment”, *Journal of Innovative Technology and Education*, 2017, Vol. 4, No. 1, pp. 19–24.

Olga Kosheleva and Vladik Kreinovich, “For Fuzzy Logic, Occam’s Principle Explains the Ubiquity of the Golden Ratio and of the 80-20 Rule”, *Journal of Innovative Technology and Education*, 2017, Vol. 4, No. 1, pp. 13–18.

Olga Kosheleva and Vladik Kreinovich, “Why Multiplication Has Higher Priority than Addition: A Pedagogical Remark”, *Journal of Innovative Technology and Education*, 2017, Vol. 4, No. 1, pp. 7–11.

Francisco Zapata, Olga Kosheleva, and Vladik Kreinovich, “It Is Advantageous to Make a Syllabus As Precise As Possible: Decision-Theoretic Analysis”, *Journal of Innovative Technology and Education*, 2017, Vol. 4, No. 1, pp. 1–5.

Songsak Sriboonchitta, Ildar Batyrshin, and Vladik Kreinovich, “Which Robust Versions of Sample Variance and Sample Covariance Are Most Appropriate for Econometrics: Symmetry-Based Analysis”, *Thai Journal of Mathematics*, 2016, Special Issue on Applied Mathematics: Bayesian Econometrics, pp. 37–50.

Kongliang Zhu, Vladik Kreinovich, and Olga Kosheleva, “Bayesian Approach to Intelligent Control and Its Relation to Fuzzy Control”, *Thai Journal of Mathematics*, 2016, Special Issue on Applied Mathematics: Bayesian Econometrics, pp. 25–36.

Thongchai Dumrongpokaphan, Pedro Barragan, and Vladik Kreinovich, “Empirically Successful Transformations from Non-Gaussian to Close-to-Gaussian Distributions: Theoretical Justification”, *Thai Journal of Mathematics*, 2016, Special Issue on Applied Mathematics: Bayesian Econometrics, pp. 51–61.

Christian Servin and Vladik Kreinovich, “Intuitionistic Fuzzy Logic Is Not Always Equivalent to Interval-Valued One”, *Notes on Intuitionistic Fuzzy Sets*, 2016, Vol. 22, No. 5, pp. 1–11.

Olga Kosheleva and Vladik Kreinovich, “Why Locating Local Optima Is Sometimes More Complicated Than Locating Global Ones”, *Mathematical Structures and Modeling*, 2016, Vol. 40, pp. 39–43.

Olga Kosheleva and Vladik Kreinovich, “Bell-Shaped Curve for Productivity Growth: An Explanation”, *Mathematical Structures and Modeling*, 2016, Vol. 40, pp. 44–47.

Andrzej Pownuk, Pedro Barragan Olague, and Vladik Kreinovich, “Why Compaction Meter Value (CMV) Is a Good Measure of Pavement Stiffness: Towards a Possible Theoretical Explanation”, *Mathematical Structures and Modeling*, 2016, Vol. 40, pp. 48–54.

Vladik Kreinovich, “Why 3-D Space? Why 10-D Space? A Possible Simple Geometric Explanation”, *Mathematical Structures and Modeling*, 2016, Vol. 40, pp. 55–58.

Olga Kosheleva and Vladik Kreinovich, “Big Data: A Geometric Explanation of a Seemingly Counterintuitive Strategy”, *Geombinatorics*, 2016, Vol. 26, No. 2, pp. 71–79.

Martha Osegueda Escobar and Vladik Kreinovich, “How to Compute von Neumann-Morgenstern Solutions”, *Mathematical Structures and Modeling*, 2016, Vol. 39, pp. 68–73.

Olga Kosheleva and Vladik Kreinovich, “Why Ragin’s Fuzzy Techniques Lead to Successful Social Science Applications: An Explanation”, *Journal of Innovative Technology and Education*, 2016, Vol. 3, No. 1, pp. 185–192.

Christian Servin and Vladik Kreinovich, “How to Determine the Stiffness of the Pavement’s Upper Layer (Base) Based on the Overall Stiffness and the Stiffness of the Lower Layer (Subgrade)”, *Journal of Innovative Technology and Education*, 2016, Vol. 2, No. 1, pp. 193–203.

Carlos Fajardo, Olga Kosheleva, and Vladik Kreinovich, “One Needs to Be Careful When Dismissing Outliers: A Realistic Example”, *Journal of Innovative Technology and Education*, 2016, Vol. 3, No. 1, pp. 205–214.

Octavio Lerma and Vladik Kreinovich, “Student Autonomy Improves Learning: A Theoretical Justification of the Empirical Results”, *Journal of Uncertain Systems*, 2016, Vol. 10, No. 1, pp. 34–38.

Gabriel Arellano, Edward Hudgins, David Pruitt, Adrian Veliz, Eric Freudenthal, and Vladik Kreinovich, “How to Gauge Disruptions Caused by Garbage Collection: Towards An Efficient Algorithm”, *Journal of Uncertain Systems*, 2016, Vol. 10, No. 1, pp. 4–9.

Julio Urenda, Olga Kosheleva, Vladik Kreinovich, and Berlin Wu, “When Can We Simplify Data Processing: An Algorithmic Answer”, *Journal of Uncertain Systems*, 2016, Vol. 10, No. 1, pp. 72–80.

Olga Kosheleva, Vladik Kreinovich, and Hung T. Nguyen, “Why It Is Important to Precisiat Goals”, *Journal of Uncertain Systems*, 2016, Vol. 10, No. 1, pp. 22–30.

Olga Kosheleva and Vladik Kreinovich, “A Simplified Explanation of What It Means to Assign a Finite Value to an Infinite Sum”, *Journal of Uncertain Systems*, 2016, Vol. 10, No. 1, pp. 15–21.

Joe Lorkowski and Vladik Kreinovich, “Why Awe Makes People More Generous: Utility Theory Can Explain Recent Experiments”, *Journal of Uncertain Systems*, 2016, Vol. 10, No. 1, pp. 53–56.

Joe Lorkowski, Olga Kosheleva, and Vladik Kreinovich, “Every Function Computable by a Single Use Expression Is a Ratio of Two Multi-Linear Functions”, *Journal of Uncertain Systems*, 2016, Vol. 10, No. 1, pp. 48–52.

Octavio Lerma, Leobardo Valera, Deana Pennington, and Vladik Kreinovich, “Testing a Power Law Model of Knowledge Propagation: Case Study of the Out of Eden Walk Project”, *Journal of Uncertain Systems*, 2016, Vol. 10, No. 1, pp. 39–47.

Vladik Kreinovich, “Solving Equations (and Systems of Equations) Under Uncertainty: How Different Practical Problems Lead to Different Mathematical and Computational Formulations”, *Granular Computing*, 2016, Vol. 1, No. 3, pp. 171–179.

Olga Kosheleva and Vladik Kreinovich, “Interpolation Sometimes Enhances and Sometimes Impedes Spatial Correlation: Simple Pedagogical Examples”, *Journal of Innovative Technology and Education*, 2016, Vol. 3, No. 1, pp. 79–84.

Vladik Kreinovich and Sergey Shary, “Interval Methods for Data Fitting under Uncertainty: A Probabilistic Treatment”, *Reliable Computing*, 2016, Vol. 23, pp. 105–141.

Olga Kosheleva and Vladik Kreinovich, “Why the Range of a Robust Statistic Under Interval Uncertainty Is Often Easier to Compute”, *Journal of Innovative Technology and Education*, 2016, Vol. 3, No. 1, pp. 37–43.

Olga Kosheleva and Vladik Kreinovich, “Science Is Helpful for Engineering Applications: A Theoretical Explanation of an Empirical Observation”, *Journal of Innovative Technology and Education*, 2016, Vol. 3, No. 1, pp. 45–50.

Francisco Zapata, Olga Kosheleva, and Vladik Kreinovich, “Why Dependence of Productivity on Group Size Is Log-Normal”, *Journal of Computing and Optimization*, 2016, Vol. 3, No. 1, pp. 63–69.

Olga Kosheleva and Vladik Kreinovich, “Waning Influence of History: Why?”, *Mathematical Structures and Modeling*, 2016, Vol. 38, pp. 126–128.

Olga Kosheleva and Vladik Kreinovich, “Why It Is Healthy to Regularly Challenge Authority: An Algorithmic Explanation”, *Mathematical Structures and Modeling*, 2016, Vol. 38, pp. 129–131.

Olga Kosheleva and Vladik Kreinovich, “Simplest Innovations Are, Empirically, the Most Promising: An Explanation”, *Mathematical Structures and Modeling*, 2016, Vol. 38, pp. 132–134.

Vladik Kreinovich, Luc Longpré, and Olga Kosheleva, “Conditional Dimension in Metric Spaces: A Natural Metric-Space Counterpart of Kolmogorov-Complexity-Based Mutual Dimension”, *Mathematical Structures and Modeling*, 2016, Vol. 37, pp. 18–24.

Pedro Barragan Olague and Vladik Kreinovich, “How to Explain The Empirical Success of Generalized Trigonometric Functions in Processing Discontinuous Signals”, *Mathematical Structures and Modeling*, 2016, Vol. 37, pp. 25–29.

Vladik Kreinovich, “Standing on the Shoulders of the Giants: Why Constructive Mathematics, Probability Theory, Interval Mathematics, and Fuzzy Mathematics Are Important”, *Reliable Computing*, 2016, Vol. 23, pp. 97–104.

Olga Kosheleva and Vladik Kreinovich, “How to Introduce Technical Details of Quantum Computing in a Theory of Computation Class: Using the Basic Case of the Deutsch-Jozsa Algorithm”, *International Journal of Computing and Optimization*, 2016, Vol. 3, No. 1, pp. 83–91.

Michal Holčapek, Irina Perfiieva, and Vladik Kreinovich, “A new reconstruction from the F-transform components”, *Fuzzy Sets and Systems*, 2016, Vol. 288, No. 1, pp. 3–25.

Vladik Kreinovich, Hung T. Nguyen, and Songsak Sriboonchitta, “Need for Data Processing Naturally Leads to Fuzzy Logic (and Neural Networks): Fuzzy Beyond Experts and Beyond Probabilities”, *International Journal of Intelligent Systems*, 2016, Vol. 31, No. 3, pp. 276–293.

Vladik Kreinovich and Olga Kosheleva, “Why the Graph Isomorphism Problem Is Easier Than Propositional Satisfiability: A Possible Qualitative Explanation”, *International Journal of Contemporary Mathematical Sciences*, 2016, Vol. 11, No. 3, pp. 97–103.

Mourat Tchoshanov, Olga Kosheleva, and Vladik Kreinovich, “From Equations to Tri-quotations and Multi-quotations”, *International Journal of Contemporary Mathematical Sciences*, 2016, Vol. 11, No. 3, pp. 105–111.

Olga Kosheleva and Vladik Kreinovich, “Explaining Boris Pasternak’s Observation that Complex Ideas Are Sometimes Easier to Understand”, *Journal of Innovative Technology and Education*, 2016, Vol. 3, No. 1, pp. 9–12.

Olga Kosheleva and Vladik Kreinovich, “Maximum Entropy Approach Is Not As Arbitrary As It May Seem at First Glance”, *Journal of Innovative Technology and Education*, 2016, Vol. 3, No. 1, pp. 1–7.

Mahdokht Afravi and Vladik Kreinovich, “Positive Consequences of Negative Attitude: Game-Theoretic Analysis”, *International Journal of Contemporary Mathematical Sciences*, 2016, Vol. 11, No. 3, pp. 113–118.

Rafik A. Aliev, Witold Pedrycz, Vladik Kreinovich, and Oleg H. Huseynov, “The general theory of decisions”, *Information Sciences*, 2016, Vol. 327, pp. 125–148.

Octavio Lerma, Olga Kosheleva, and Vladik Kreinovich, “Why Injecting Fine Dust into a Tornado Is More Promising Than Injecting Coarse Dust: A Geometric Explanation”, *Geoinformatics*, 2016, Vol. 25, No. 3, pp. 118–122.

Mazin Al-Zoubi, Carlos Chang, Soheil Nazarian, and Vladik Kreinovich, “A Systematic Statistical Approach to Populate Missing Performance Data in Pavement Management Systems”, *Journal of Infrastructure Systems*, 2015, Vol. 21, No. 4, paper 04015002.

Vladik Kreinovich, Martine Ceberio, and Quentin Brefort, “In category of sets and relations, it is possible to describe functions in purely category terms”, *Eurasian Mathematical Journal*, 2015, Vol. 6, No. 2, pp. 90–94.

Michal Holcapek, Irina Perfilieva, Vilem Novak, and Vladik Kreinovich, “Necessary and Sufficient Conditions for Generalized Uniform Fuzzy Partitions”, *Fuzzy Sets and Systems*, 2015, Vol. 277, pp. 97–121.

Vladik Kreinovich and Crysostomos Stylios, “Why Fuzzy Cognitive Maps Are Efficient”, *International Journal of Computers, Communications, & Control*, 2015, Vol. 10, No. 6, pp. 825–833.

Vladik Kreinovich and Chrysostomos D. Stylios, “When Should We Switch from

Interval-Valued Fuzzy to Full Type-2 Fuzzy (e.g., Gaussian)?”, *Critical Review*, 2015, Vol. XI, pp. 57–66.

Vladik Kreinovich and Olga Kosheleva, “Paradox of Choice: A Possible Explanation”, *Mathematical Structures and Modeling*, 2015, Vol. 36, pp. 49–52.

Julio Urenda, David Finston, and Vladik Kreinovich, “Once We Know that a Polynomial Mapping Is Rectifiable, We Can Algorithmically Find a Rectification”, *Mathematical Structures and Modeling*, 2015, Vol. 36, pp. 67–73.

Olga Kosheleva and Vladik Kreinovich, “Constructive Mathematics Is Seemingly Simple but There Are Still Open Problems: Kreisel’s Observation Explained”, *Journal of Innovative Technology and Education*, 2015, Vol. 2, No. 1, pp. 51–56.

Olga Kosheleva and Vladik Kreinovich, “Occam’s Razor Explains Matthew Effect”, *Journal of Innovative Technology and Education*, 2015, Vol. 2, No. 1, pp. 47–50.

Vladik Kreinovich and Rujira Ouncharoen, “Fuzzy (and interval) techniques in the age of big data: an overview with applications to environmental science, geosciences, engineering, and medicine”, *International Journal of Uncertainty, Fuzziness, and Knowledge-Based Systems*, 2015, Vol. 23, Suppl. 1, pp. 75–89.

Olga Kosheleva and Vladik Kreinovich, “Al-Sijistani’s and Maimonides’s Double Negation Theology Explained by Constructive Logic”, *International Mathematical Forum*, 2015, Vol. 10, No. 12, pp. 587–593.

Olga Kosheleva, and Vladik Kreinovich, “A Feasible Algorithm for Checking n -Scissors Congruence of Polyhedra in \mathbb{R}^d ”, *Geombinatorics*, 2015, Vol. 25, No. 2, pp. 70–75.

Vladik Kreinovich, Hung T. Nguyen, Olga Kosheleva, and Rujira Ouncharoen, “50 Years of Fuzzy: from Discrete to Continuous to – Where?”, *Journal of Intelligent and Fuzzy Systems*, 2015, Vol. 29, pp. 989–1009.

Beverly Rivera, Francisco Zapata, and Vladik Kreinovich, “Security Risk Assessment: Towards a Justification for the Security Risk Factor Table Model”, *Journal of Advanced Computational Intelligence and Intelligent Informatics (JACIII)*, 2015, Vol. 19, No. 5, pp. 676–680.

Joe Lorkowski, Olga Kosheleva, Vladik Kreinovich, and Sergei Soloviev, “How Design Quality Improves with Increasing Computational Abilities: General Formulas and Case Study of Aircraft Fuel Efficiency”, *Journal of Advanced Computational Intelligence and Intelligent Informatics (JACIII)*, 2015, Vol. 19, No. 5, pp. 581–584.

Meng Yuan, Xu Lin, Junzo Watada, and Vladik Kreinovich, “Minimax Portfolio Optimization under Interval Uncertainty”, *Journal of Advanced Computational Intelligence and Intelligent Informatics (JACIII)*, 2015, Vol. 19, No. 5, pp. 575–580.

Olga Kosheleva and Vladik Kreinovich, “Why Big-O and Little-O in Algorithm Complexity: A Pedagogical Remark”, *Mathematical Structures and Modeling*, 2015, Vol. 35, pp. 34–41.

Olga Kosheleva and Vladik Kreinovich, “Analysis of Random Metric Spaces Explains Emergence Phenomenon and Suggests Discreteness of Physical Space”, *Mathematical Structures and Modeling*, 2015, Vol. 35, pp. 42–49.

Joe Lorkowski, Olga Kosheleva, Luc Longpré, and Vladik Kreinovich, “When Can We Reduce Multi-Variable Range Estimation Problem to Two Fewer-Variable Problems?”, *Reliable Computing*, 2015, Vol. 21, pp. 1–10.

Olga Kosheleva and Vladik Kreinovich, “Why Political Scientists Are Wrong 15% of the Time”, *Journal of Innovative Technology and Education*, 2015, Vol. 2, No. 1, pp. 37–42.

Olga Kosheleva and Vladik Kreinovich, “Gazelle Companies: What Is So Special About the 20% Threshold?”, *Journal of Innovative Technology and Education*, 2015, Vol. 2, No. 1, pp. 43–46.

Octavio Lerma, Olga Kosheleva, and Vladik Kreinovich, “A Simple Geometric Model Provides a Possible Quantitative Explanation of the Advantages of Immediate Feedback in Student Learning”, *Geombinatorics*, 2015, Vol. 25, No. 1, pp. 22–29.

Olga Kosheleva and Vladik Kreinovich, “Why We Need Extra Physical Dimensions: A Simple Geometric Explanation”, *Mathematical Structures and Modeling*, 2015, Vol. 34, pp. 24–28.

Vladik Kreinovich and Olga Kosheleva, “Towards a Physics-Motivated Small-Velocities Approximation to General Relativity”, *Mathematical Structures and Modeling*, 2015, Vol. 34, pp. 29–38.

Vladik Kreinovich and Olga Kosheleva, “Wiener-Process-Type Evasive Aircraft Actions Are Indeed Optimal Against Anti-Aircraft Guns: Wiener’s Data Revisited”, *Mathematical Structures and Modeling*, 2015, Vol. 34, pp. 85–89.

Olga Kosheleva and Vladik Kreinovich, “When an Idea Comes, Write It Down Right Away: Mathematical Justification of Vladimir Smirnov’s Advice”, *Mathematical Structures and Modeling*, 2015, Vol. 34, pp. 90–93.

Komsan Suriya, Tatcha Sudtasan, Tonghui Wang, Octavio Lerma, and Vladik Kreinovich, “A Natural Simple Model of Scientists’ Strength Leads to Skew-Normal Distribution”, *International Journal of Intelligent Technologies and Applied Statistics (IJITAS)*, 2015, Vol. 8, No. 2, pp. 153–158.

Hung T. Nguyen, Berlin Wu, and Vladik Kreinovich, “Our Reasoning is Clearly Fuzzy, so Why Is Crisp Logic So Often Adequate?”, *International Journal of Intelligent Technologies and Applied Statistics (IJITAS)*, 2015, Vol. 8, No. 2, pp. 133–137.

Vladik Kreinovich and Christian Servin, “How to Test Hypotheses When Exact Values are Replaced by Intervals to Protect Privacy: Case of t-Tests”, *International Journal of Intelligent Technologies and Applied Statistics (IJITAS)*, 2015, Vol. 8, No. 2, pp. 93–102.

Francisco Zapata and Vladik Kreinovich, “Possible Geometric Explanations for Basic Empirical Dependencies of Systems Engineering”, *Journal of Uncertain Systems*, 2015, Vol. 9, No. 2, pp. 151–155.

Tonghui Wang, Olga Kosheleva, and Vladik Kreinovich, “How to Explain the Definition of Stochastic Affiliation to Economics Students”, *Journal of Uncertain Systems*, 2015, Vol. 9, No. 2, pp. 148–150.

Komsan Suriya, Tatcha Sudtasan, Tonghui Wang, Octavio Lerma, and Vladik Kreinovich, “Diversity Is Beneficial for a Research Group: One More Quantitative Argument”, *Journal of Uncertain Systems*, 2015, Vol. 9, No. 2, pp. 144–147.

Quentin Brefort, Luc Jaulin, Martine Ceberio, and Vladik Kreinovich, “Towards Fast and Reliable Localization of an Underwater Object: An Interval Approach”, *Journal of Uncertain Systems*, 2015, Vol. 9, No. 2, pp. 95–102.

Jerald Brady, Octavio Lerma, Vladik Kreinovich, and Craig Tweedie, “Toward Computing an Optimal Trajectory for an Environment-Oriented Unmanned Aerial Vehicle (UAV) under Uncertainty”, *Journal of Uncertain Systems*, 2015, Vol. 9, No. 2, pp. 84–94.

Olga Kosheleva and Vladik Kreinovich, “Newton’s Laws: What is Their Operational Meaning?”, *Mathematical Structures and Modeling*, 2015, Vol. 33, pp. 38–49.

Vladik Kreinovich and Olga Kosheleva, “Among Several Successful Algorithms, Simpler Ones Usually Work Better: A Possible Explanation of an Empirical Observation”, *Mathematical Structures and Modeling*, 2015, Vol. 33, pp. 50–55.

Baokun Li, Gang Xiang, Vladik Kreinovich, and Panagis Moschopoulos, “From Unbiased Numerical Estimates to Unbiased Interval Estimates”, *Critical Review: A Publication of Society for Mathematics of Uncertainty*, 2015, Vol. 9, pp. 1–12.

Olga Kosheleva and Vladik Kreinovich, “Why Right-Brain Cultures Are More Flexible: A Possible Explanation of Yu. Manin’s Observation”, *International Mathematical Forum*, 2015, Vol. 10, No. 4, pp. 175–180.

Octavio Lerma, Olga Kosheleva, and Vladik Kreinovich, “Interleaving Enhances Learning: A Possible Geometric Explanation”, *Geoinformatics*, 2015, Vol. 24, No. 3, pp. 135–139.

V. Kreinovich, “Dynamic Fuzzy Logic Leads to More Adequate ‘And’ and ‘Or’ Operations”, *International Journal of Knowledge Engineering and Soft Data Paradigms*, 2014, Vol. 4, No. 4, pp. 327–338.

Joe Lorkowski and Vladik Kreinovich, “How to Gauge Unknown Unknowns: A Possible Theoretical Explanation of the Usual Safety Factor of 2”, *Mathematical Structures and Modeling*, 2014, Vol. 32, pp. 49–52.

Beverly Rivera, Francisco Zapata, and Vladik Kreinovich, “Granularity Explains Empirical Factor-of-Three Relation Between Probabilities of Pulmonary Embolism

in Different Patient Categories”, *Mathematical Structures and Modeling*, 2014, Vol. 32, pp. 130–135.

Olga Kosheleva, Michael Zakharevich, and Vladik Kreinovich, “If Many Physicists Are Right and No Physical Theory Is Perfect, Then by Using Physical Observations, We Can Feasibly Solve Almost All Instances of Each NP-Complete Problem”, *Mathematical Structures and Modeling*, 2014, Vol. 31, pp. 4–17.

Olga Kosheleva and Vladik Kreinovich, “Towards a Formal Description of Understandability (Causality, Pre-Requisites): From Prosorov’s Phonocentric Topology to More General Interior (Closure) Structures”, *Mathematical Structures and Modeling*, 2014, Vol. 31, pp. 18–26.

Olga Kosheleva and Vladik Kreinovich, “Observable Causality Implies Lorentz Group: Alexandrov-Zeeman-Type Theorem for Space-Time Regions”, *Mathematical Structures and Modeling*, 2014, Vol. 30, pp. 4–14.

Beverly Rivera, Irbis Gallegos, and Vladik Kreinovich, “How to Assign Weights to Different Factors in Vulnerability Analysis: Towards a Justification of a Heuristic Technique”, *Mathematical Structures and Modelling*, 2014, Vol. 30, pp. 87–98.

Joe Lorkowski and Vladik Kreinovich, “Likert-type fuzzy uncertainty from a traditional decision making viewpoint: how symmetry helps explain human decision making (including seemingly irrational behavior)”, *Applied and Computational Mathematics*, 2014, Vol. 13, No. 3, pp. 275–298.

Hung T. Nguyen, Vladik Kreinovich, and Berlin Wu, “Using Second-Order Probabilities to Make Maximum Entropy Approach to Copulas More Reasonable”, *Thai Journal of Mathematics*, 2014, Special Issue on Copula Mathematics and Econometrics, pp. 1–10.

X. Gong, H. T. Nguyen, V. Kreinovich, and S. Sriboonchitta, “Examining the Consistence of Futures Margin Levels using Bivariate Extreme Value Copulas”, *Thai Journal of Mathematics*, 2014, Special Issue on Copula Mathematics and Econometrics, pp. 39–57.

Jennifer Del Valle, Vladik Kreinovich, and Piotr J. Wojciechowski, “Feasible algorithms for lattice and directed subspaces”, *Mathematical Proceedings of the Royal Irish Academy*, 2014, Vol. 114A, No. 2, pp. 199–204.

Olga Kosheleva and Vladik Kreinovich, “Kekulé’s Benzene Structure: A Case Study of Teaching Usefulness of Symmetry”, *Applied Mathematical Sciences*, 2014, Vol. 8, No. 144, pp. 7183–7194.

Beverly Rivera, Francisco Zapata, and Vladik Kreinovich, “From Numerical Probabilities to Linguistic Probabilities: A Theoretical Justification of Empirical Granules Used in Risk Management”, *Applied Mathematical Sciences*, 2014, Vol. 8, No. 144, pp. 7195–7200.

Olga Kosheleva, Vladik Kreinovich, and Octavio Lerma, “Fitts’s Law: Towards a Geometric Explanation”, *Geoinformatics*, 2014, Vol. 24, No. 2, pp. 78–83.

Vilem Novak, Irina Perfilieva, Michal Holcapek, and Vladik Kreinovich, “Filtering out high frequencies in time series using F-transform”, *Information Sciences*, 2014, Vol. 274, pp. 192–209.

Joe Lorkowski, Olga Kosheleva, and Vladik Kreinovich, “How to Modify Grade Point Average (GPA) to Make It More Adequate”, *International Mathematical Forum*, 2014, Vol. 9, No. 28, pp. 1363–1367.

Jaime Nava and Vladik Kreinovich, “Why A Model Produced by Training a Neural Network Is Often More Computationally Efficient than a Nonlinear Regression Model: A Theoretical Explanation”, *Journal of Uncertain Systems*, 2014, Vol. 8, No. 3, pp. 193–204.

L. Octavio Lerma, Deana Pennington, and Vladik Kreinovich, “On Early Stages of Idea Propagation, the Number of Adopters Grows as $n(t) \approx c \cdot t^a$: Theoretical Explanation of the Empirical Observation”, *Journal of Uncertain Systems*, 2014, Vol. 8, No. 3, pp. 180–185.

Francisco Zapata, Luis Gutierrez, and Vladik Kreinovich, “How to Faster Test a Device for Different Combinations of Parameters”, *Journal of Uncertain Systems*, 2014, Vol. 8, No. 3, pp. 233–238.

Christian Servin and Vladik Kreinovich, “Images are Easier to Restore than 1-D Signals: A Theoretical Explanation of a Surprising Empirical Phenomenon”, *Journal of Uncertain Systems*, 2014, Vol. 8, No. 3, pp. 211–215.

Carlos Ramirez, Reinaldo Sanchez, Vladik Kreinovich, and Miguel Argaez. “ $\sqrt{x^2 + \mu}$ is the Most Computationally Efficient Smooth Approximation to $|x|$: a Proof”, *Journal of Uncertain Systems*, 2014, Vol. 8, No. 3, pp. 205–210.

Olga Kosheleva and Vladik Kreinovich, “Space-Time Assumptions Behind NP-Hardness of Propositional Satisfiability”, *Mathematical Structures and Modelling*, 2014, Vol. 29, pp. 13–30.

Francisco Zapata and Vladik Kreinovich, “Knowledge Geometry Is Similar to General Relativity: Both Mass and Knowledge Curve the Corresponding Spaces”, *Mathematical Structures and Modeling*, 2014, Vol. 29, pp. 31–37.

Olga Kosheleva and Vladik Kreinovich, “Deep mathematical results are the ones that connect seemingly unrelated areas: towards a formal proof of Gian-Carlo Rota’s thesis”, *Applied Mathematical Sciences*, 2014, Vol. 8, No. 48, pp. 2391–2396.

Olga Kosheleva and Vladik Kreinovich, “Simpler-to-Describe Cases are Often More Difficult to Prove: A Possible Explanation”, *International Mathematical Forum*, 2014, Vol. 9, No. 16, pp. 767–772.

Olga Kosheleva and Vladik Kreinovich, “For each mathematical statement, only finitely many of its generalizations are useful: a formal proof of E. Bishop’s idea”, *International Mathematical Forum*, 2014, Vol. 9, No. 16, pp. 763–766.

Hung T. Nguyen and Vladik Kreinovich, “How to Fully Represent Expert Information about Imprecise Properties in a Computer System – Random Sets, Fuzzy Sets, and Beyond: An Overview”, *International Journal of General Systems*, 2014, Vol. 43, Nos. 5–6, pp. 586–609.

Olga Kosheleva and Vladik Kreinovich, “Zipf’s Law and 7 ± 2 Principle Lead to a Possible Explanation of Daniel’s Law”, *International Mathematical Forum*, 2014, Vol. 9, No. 8, pp. 391–396.

Andres Ortiz and Vladik Kreinovich, “Using Symmetries (Beyond Geometric Symmetries) in Chemical Computations: Computing Parameters of Multiple Binding Sites”, *Symmetry*, 2014, Vol. 6, pp. 90–102.

Olga Kosheleva and Vladik Kreinovich, “Dialect or a New Language: A Possible Explanation of the 70% Mutual Intelligibility Threshold”, *International Mathematical Forum*, 2014, Vol. 9, No. 4, pp. 189–192.

Marketa Krmelova, Martin Trnecka, Vladik Kreinovich, and Berlin Wu, “How to Distinguish True Dependence from Varying Independence?”, *Journal of Intelligent Technologies and Applied Statistics*, 2013, Vol. 6, No. 4, pp. 339–351.

Olga Kosheleva and Vladik Kreinovich, “Why 20? Why 40? A Possible Explanation of a Special Role of 20 and 40 in Traditional Number Systems”, *Applied Mathematical Sciences*, 2013, Vol. 7, No. 144, pp. 7179–7186.

Olga Kosheleva and Vladik Kreinovich, “Finding the Best Function: A Way to Explain Calculus of Variations to Engineering and Science Students”, *Applied Mathematical Sciences*, 2013, Vol. 7, No. 144, pp. 7187–7192.

Olga Kosheleva and Vladik Kreinovich, “Stochastic Causality Is Inconsistent with the Lorentz Group”, *Mathematical Structures and Modelling*, 2013, Vol. 28, No. 2, pp. 15–20.

Vladik Kreinovich and Olga Kosheleva, “Is Lagrangian Formalism Adequately Describing Energy Conservation?”, *Mathematical Structures and Modelling*, 2013, Vol. 28, No. 2, pp. 21–27.

A. G. Aksoy, Z. Glassman, O. Kosheleva, and V. Kreinovich, “From Urysohn’s Universal Metric Space to a Universal Space-Time”, *Mathematical Structures and Modelling*, 2013, Vol. 28, No. 2, pp. 28–34.

Olga Kosheleva and Vladik Kreinovich, “How to Explain (and Overcome) 2% Barrier in Teaching Computer Science: Towards New Applications of Fuzzy Ideas”, *Archives for the Philosophy and History of Soft Computing*, 2013, Vol. 1, No. 1.

Olga Kosheleva and Vladik Kreinovich, “Why in Mayan Mathematics, Zero and Infinity Are the Same: A Possible Explanation”, *Applied Mathematical Sciences*, 2013, Vol. 7, No. 124, pp. 6193–6197.

Olga Kosheleva and Vladik Kreinovich, “Perception of Elite and Universal Systems of Higher Education: An Explanation of the Empirical Thresholds”, *International Mathematical Forum*, 2013, Vol. 8, No. 36, pp. 1779–1783.

Olga Kosheleva and Vladik Kreinovich, “Why Rozenzweig-style midrashic approach makes rational sense: a logical (Spinoza-like) explanation of a seemingly non-logical approach”, *International Mathematical Forum*, 2013, Vol. 8, No. 36, pp. 1773–1777.

Vladik Kreinovich, Hung T. Nguyen, and Berlin Wu, “Towards a Localized Version of Pearson’s Correlation Coefficient”, *Journal of Intelligent Technologies and Applied Statistics*, 2013, Vol. 6, No. 3, pp. 215–224.

Andres Ortiz and Vladik Kreinovich, “Full Superposition Principle Is Inconsistent with Non-Deterministic Versions of Quantum Physics”, *Cybernetics and Physics*, 2013, Vol. 2, No. 1, pp. 37–40.

Andrzej Pownuk, Luc Longpré, and Vladik Kreinovich, “Checking Monotonicity Is NP-Hard Even for Cubic Polynomials”, *Reliable Computing*, 2013, Vol. 18, pp. 90–96.

Matthias Stein, Michael Beer, and Vladik Kreinovich, “Bayesian Approach for Inconsistent Information”, *Information Sciences*, 2013, Vol. 245, No. 1, pp. 96–111.

Francisco Zapata, Vladik Kreinovich, Cliff Joslyn, and Emilie Hogan, “Orders on Intervals Over Partially Ordered Sets: Extending Allen’s Algebra and Interval Graph Results”, *Soft Computing*, 2013, Vol. 17, No. 8, pp. 1379–1391.

Michael Beer and Vladik Kreinovich, “Interval or Moments: Which Carry More Information?”, *Soft Computing*, 2013, Vol. 17, No. 8, pp. 1319–1327.

Carlos Ramirez, Vladik Kreinovich, and Miguel Arguez, “Why ℓ_1 Is a Good Approximation to ℓ_0 : A Geometric Explanation”, *Journal of Uncertain Systems*, 2013, Vol. 7, No. 3, pp. 203–207.

Michael Zakharevich and Vladik Kreinovich, “A New Analog Optical Processing Scheme for Solving NP-Hard Problems”, *Journal of Uncertain Systems*, 2013, Vol. 7, No. 3, pp. 238–240.

Vladik Kreinovich, “In quantum physics, free will leads to nonconservation of energy”, *Journal of Uncertain Systems*, 2013, Vol. 7, No. 3, pp. 176–178.

Olga Kosheleva and Vladik Kreinovich, “For Describing Uncertainty, Ellipsoids Are Better than Generic Polyhedra and Probably Better than Boxes: A Remark”, *Mathematical Structures and Modeling*, 2013, Vol. 27, pp. 38–41.

Olga Kosheleva and Vladik Kreinovich, “Brans-Dicke Scalar-Tensor Theory of Gravitation May Explain Time Asymmetry of Physical Processes”, *Mathematical Structures and Modeling*, 2013, Vol. 27, pp. 28–37.

Michael Beer, Scott Ferson, and Vladik Kreinovich, “Imprecise probabilities in engineering analyses”, *Mechanical Systems and Signal Processing*, 2013, Vol. 37, pp. 4–29.

Ali Jalal-Kamali and Vladik Kreinovich, “Estimating Correlation really paradigm under Interval Uncertainty”, *Mechanical Systems and Signal Processing*, 2013, Vol. 37, pp. 43–53.

Marcin Michalak and Vladik Kreinovich, “Is It Possible to Have a Feasible Enclosure-Computing Method Which Is Independent of the Equivalent Form?”, *Reliable Computing*, 2013, Vol. 18, pp. 1–8.

Gang Xiang and Vladik Kreinovich, “Towards Fast and Accurate Algorithms for Processing Fuzzy Data: Interval Computations Revisited”, *International Journal of General Systems*, 2013, Vol. 42, No. 2, pp. 197–223.

Vladik Kreinovich, “How to Define Relative Approximation Error of an Interval Estimate: A Proposal”, *Applied Mathematical Sciences*, 2013, Vol. 7, No. 5, pp. 211–216.

Vladik Kreinovich, “Membership Functions or α -Cuts? Algorithmic (Constructivist) Analysis Justifies an Interval Approach”, *Applied Mathematical Sciences*, 2013, Vol. 7, No. 5, pp. 217–228.

Olga Kosheleva, Vladik Kreinovich, and Baokun Li, “Should Voting be Mandatory? Democratic Decision Making from the Economic Viewpoint”, *International Journal of Innovative Management, Information & Production (IJIMIP)*, 2012, Vol. 3, No. 4, pp. 80–84.

Vladik Kreinovich, Hung T. Nguyen, and Songsak Sriboonchitta, “Prediction in Econometrics: Towards Mathematical Justification of Simple (and Successful) Heuristics”, *International Journal of Intelligent Technologies and Applied Statistics (IJITAS)*, 2012, Vol. 5, No. 4, pp. 443–460.

Jaime Nava and Vladik Kreinovich, “A Simple Physics-Motivated Equivalent Reformulation of $P=NP$ that Makes This Equality (Slightly) More Plausible”, *Cybernetics and Physics*, 2012, Vol. 1, No. 4, pp. 287–291.

Van Nam Huynh, L. Octavio Lerma, and Vladik Kreinovich, “Kansei Engineering: Towards Optimal Set of Designs”, *International Journal of Innovative Management, Information & Production (IJIMIP)*, 2012, Vol. 3, No. 3, pp. 49–53.

Vladik Kreinovich and Olga Kosheleva, “How to Define Mean, Variance, etc., for Heavy-Tailed Distributions: A Fractal-Motivated Approach”, *International Journal of Innovative Management, Information & Production (IJIMIP)*, 2012, Vol. 3, No. 3, pp. 1–9.

Salamah Salamah, Ann Gates, and Vladik Kreinovich, “Validated Templates for Specification of Complex LTL Formulas”, *Journal of Systems and Software*, 2012, Vol. 85, pp. 1915–1929.

Vladik Kreinovich and Andres Ortiz, “If Energy Is Not Preserved, Then Planck’s Constant Is No Longer a Constant: A Theorem”, *Mathematical Structures and Modeling*, 2012, Vol. 26, pp. 57–63.

Vladik Kreinovich, “Zadeh’s Vision of Going from Fuzzy to Computing With Words: from the Idea’s Origin to Current Successes to Remaining Challenges”, *Mathware and Soft Computing Magazine*, 2012, Vol. 19, No. 2, pp. 41–42.

Vladik Kreinovich, “In applications, a rigorous proof is not enough: it is also important to have an intuitive understanding”, *Applied Mathematical Sciences*, 2012, Vol. 6, No. 125, pp. 6215–6219.

Vladik Kreinovich, “Negative Results of Computable Analysis Disappear If We Restrict Ourselves to Random (Or, More Generally, Typical) Inputs”, *Mathematical Structures and Modeling*, 2012, Vol. 25, pp. 100–113.

Vladik Kreinovich, Monchaya Chiangpradit, and Wararit Panichkitkosolkul, “Efficient Algorithms for Heavy-Tail Analysis under Interval Uncertainty”, *Annals of Operations Research*, 2012, Vol. 195, No. 1, pp. 73–96.

Jaime Nava and Vladik Kreinovich, “Towards Symmetry-Based Explanation of (Approximate) Shapes of Alpha-Helices and Beta-Sheets (and Beta-Barrels) in Protein Structure”, *Symmetry*, 2012, Vol. 4, No. 1, pp. 15–25.

Francisco Zapata and Vladik Kreinovich, “Reconstructing an Open Order from Its Closure, with Applications to Space-Time Physics and to Logic”, *Studia Logica*, 2012, Vol. 100, No. 1–2, pp. 419–435.

V. Kreinovich, C. Jacob, D. Dubois, J. Cardoso, and M. Ceberio, “Failure Analysis of a Complex System Based on Partial Information about Subsystems, with Potential Applications to Aircraft Maintenance”, *Applied and Computational Mathematics*, 2012, Vol. 11, No. 2, pp. 165–179.

Hans-Peter Künzi, Francisco Zapata, and Vladik Kreinovich, “When Is the Busemann Product a Lattice? A Relation Between Metric Spaces and Corresponding Space-Time Models”, *Applied Mathematical Sciences*, 2012, Vol. 6, No. 66, pp. 3267–3276.

Chris Cuellar, Evan Longpré, and Vladik Kreinovich, “Why L^2 Topology in Quantum Physics”, *Journal of Uncertain Systems*, 2012, Vol. 6, No. 2, pp. 92–99.

Vladik Kreinovich and Jaime Nava, “I-Complexity and Discrete Derivative of Logarithms: A Symmetry-Based Explanation”, *Journal of Uncertain Systems*, 2012, Vol. 6, No. 2, pp. 118–121.

Ali Jalal-Kamali, Ondrej Nebesky, Michael H. Durcholz, Vladik Kreinovich, and Luc Longpré, “Towards a “Generic” Notion of Genericity: From “Typical” and “Random” to Meager, Shy, etc.”, *Journal of Uncertain Systems*, 2012, Vol. 6, No. 2, pp. 104–113.

Michael Zakharevich and Vladik Kreinovich, “Computation in quantum space-time could lead to a super-polynomial speedup”, *Journal of Uncertain Systems*, 2012, Vol. 6, No. 2, pp. 146–151.

Jaime Nava and Vladik Kreinovich, “Orthogonal Bases Are the Best: A Theorem

Justifying Bruno Apolloni's Heuristic Neural Network Idea", *Journal of Uncertain Systems*, 2012, Vol. 6, No. 2, pp. 122-127.

Monchaya Chiangpradit, Wararit Panichkitkosolkul, Hung T. Nguyen, and Vladik Kreinovich, "Extreme Distributions on Intervals", *Computational Technologies*, 2012, Vol. 17, No. 1, pp. 17-25.

Jaime Nava and Vladik Kreinovich, "Towards Interval Techniques for Model Validation", *Computing*, 2012, Vol. 94, No. 2, pp. 257-269.

Omar Ochoa, Aaron A. Velasco, Christian Servin, and Vladik Kreinovich, "Model Fusion under Probabilistic and Interval Uncertainty, with Application to Earth Sciences", *International Journal of Reliability and Safety*, 2012, Vol. 6, No. 1-3, pp. 167-187.

Aline Jaimes, Craig Tweedie, Vladik Kreinovich, and Martine Ceberio, "Scale-Invariant Approach to Multi-Criterion Optimization under Uncertainty, with Applications to Optimal Sensor Placement, in Particular, to Sensor Placement in Environmental Research", *International Journal of Reliability and Safety*, 2012, Vol. 6, No. 1-3, pp. 188-203.

Olga Kosheleva and Vladik Kreinovich, "Towards Optimal Effort Distribution in Process Design under Uncertainty, with Application to Education", *International Journal of Reliability and Safety*, 2012, Vol. 6, No. 1-3, pp. 148-166.

Nitaya Buntao and Vladik Kreinovich, "Uniqueness of Reconstruction for Yager's t-Norm Combination of Probabilistic and Possibilistic Knowledge", *International Journal of Intelligence Systems*, 2012, Vol. 27, No. 1, pp. 16-22.

Vladik Kreinovich, "Designing, Understanding, and Analyzing Unconventional Computation: The Important Role of Logic and Constructive Mathematics", *Applied Mathematical Sciences*, 2012, Vol. 6, No. 13, pp. 629-644.

Vladik Kreinovich, "How to Encourage Imperfect Individuals to Care More about Society in General: a Utility-Theory Approach", *Applied Mathematical Sciences*, 2012, Vol. 6, No. 13, pp. 654-649.

Vladik Kreinovich, Gang Xiang, and Michael Oberguggenberger, "How to Define a Confidence Set for Functions: A New Justification of the Area Method", *International Journal of General Systems*, 2011, Vol. 40, No. 7, pp. 727-739.

Irina Perfilieva and Vladik Kreinovich, "Why Fuzzy Transform Is Efficient in Large-Scale Prediction Problems: A Theoretical Explanation", *Advances in Fuzzy Systems*, Vol. 2011, Article ID 985839, doi:10.1155/2011/985839.

Irina Perfilieva and Vladik Kreinovich, "Towards an (Even More) Natural Probabilistic Interpretation of Fuzzy Transforms (and of Fuzzy Modeling)", *Advances in Fuzzy Systems*, Vol. 2011, Article ID 719256, doi:10.1155/2011/719256.

Irina Perfilieva and Vladik Kreinovich, "Fuzzy Transforms of Higher Order Approximate Derivatives: A Theorem", *Fuzzy Sets and Systems*, 2011, Vol. 180, No. 1, pp. 55-68.

Vladik Kreinovich, Hung T. Nguyen, and Songsak Sriboonchitta, “How to Bargain: An Interval Approach”, *International Journal of Intelligent Technologies and Applied Statistics (IJITAS)*, 2011, Vol. 4, No. 2, pp. 147–164.

Octavio Lerma, Eric Gutierrez, Chris Kiekintveld, and Vladik Kreinovich, “Towards Optimal Knowledge Processing: From Centralization Through Cyberinfrastructure to Cloud Computing”, *International Journal of Innovative Management, Information & Production (IJIMIP)*, 2011, Vol. 2, No. 2, pp. 67–72.

Jaime Nava, Juan Ferret, Vladik Kreinovich, Gloria Berumen, Sandra Griffin, and Edgar Padilla, “Why Feynman Path Integration?”, *Journal of Uncertain Systems*, 2011, Vol. 5, No. 2, pp. 102–110.

Vladik Kreinovich, “Expanding Algorithmic Randomness to the Algebraic Approach to Quantum Physics: Kolmogorov Complexity and Quantum Logics”, *Journal of Uncertain Systems*, 2011, Vol. 5, No. 2, pp. 90–95.

Jaime Nava and Vladik Kreinovich, “Equivalence of Gian-Carlo Rota Poset Approach and Taylor Series Approach Extended to Variant Ligands”, *Journal of Uncertain Systems*, 2011, Vol. 5, No. 2, pp. 111–118.

Nitaya Buntao and Vladik Kreinovich, “How to Combine Probabilistic and Possibilistic (Expert) Knowledge: Uniqueness of Reconstruction in Yager’s (Product) Approach”, *International Journal of Innovative Management, Information & Production (IJIMIP)*, 2011, Vol. 2, No. 1, pp. 1–8.

Vladik Kreinovich, “Engineering Design under Imprecise Probabilities: Computational Complexity”, *Cubo, A Mathematical Journal*, 2011, Vol. 13, No. 1, pp. 97–117.

Luc Longpré, Christian Servin, and Vladik Kreinovich, “Quantum Computation Techniques for Gauging Reliability of Interval and Fuzzy Data”, *International Journal of General Systems*, 2011, Vol. 40, No. 1, pp. 99–109.

Vladik Kreinovich, Ladislav Kohout, and Eunjin Kim, “Square Root of ‘Not’: A Major Difference Between Fuzzy and Quantum Logics”, *International Journal of General Systems*, 2011, Vol. 40, No. 1, pp. 111–127.

Vladik Kreinovich and Bartłomiej Jacek Kubica, “From Computing Sets of Optima, Pareto Sets, and Sets of Nash Equilibria to General Decision-Related Set Computations”, *Journal of Universal Computer Science*, 2010, Vol. 16, No. 18, pp. 2657–2685.

Aline Jaimes, Craig Tweedy, Tanja Magoc, Vladik Kreinovich, and Martine Ceberio, “Selecting the Best Location for a Meteorological Tower: A Case Study of Multi-Objective Constraint Optimization”, *Journal of Uncertain Systems*, 2010, Vol. 4, No. 4, pp. 261–269.

Jaime Nava, Vladik Kreinovich, Guillermo Restrepo, and Douglas J. Klein, “Discrete Taylor Series as a Simple Way to Predict Properties of Chemical Substances

like Benzenes and Cubanes”, *Journal of Uncertain Systems*, 2010, Vol. 4, No. 4, pp. 270–290.

Martine Ceberio and Vladik Kreinovich, “Computing with Tensors: Potential Applications of Physics-Motivated Mathematics to Computer Science”, *Journal of Uncertain Systems*, 2010, Vol. 4, No. 4, pp. 257–260.

Nitaya Buntao, Narunchara Katemee, and Vladik Kreinovich, “A Possible Way to Avoid Heat Death”, *Journal of Uncertain Systems*, 2010, Vol. 4, No. 4, pp. 250–256.

Martine Ceberio and Vladik Kreinovich, “Diagonalization is also practically useful: a geometric idea”, *Geombinatorics*, 2010, Vol. 20, No. 1, pp. 15–20.

Paulo Pinheiro da Silva, Aaron Velasco, Olga Kosheleva, and Vladik Kreinovich, “How AI-Type Uncertainty Ideas Can Improve Inter-Disciplinary Collaboration and Education: Lessons from a Case Study”, *Journal of Advanced Computational Intelligence and Intelligent Informatics JACIII*, 2010, Vol. 14, No. 6, pp. 700–707.

Jan Beck, David Nemir, and Vladik Kreinovich, “Minimum Description Length (MDL) Principle as a Possible Approach to Arc Detection”, *Applied Mathematical Sciences*, 2010, Vol. 4, No. 63, pp. 3143–3152.

Omar Ochoa, Martine Ceberio, and Vladik Kreinovich, “How to Describe Spatial Resolution: An Approach Similar to the Central Limit Theorem”, *Applied Mathematical Sciences*, 2010, Vol. 4, No. 63, pp. 3153–3160.

Songsak Sriboonchitta, Hung T. Nguyen, and Vladik Kreinovich, “How to Relate Spectral Risk Measures and Utilities”, *International Journal of Intelligent Technologies and Applied Statistics*, 2010, Vol. 3, No. 2, pp. 141–158.

Gennady N. Solopchenko, Konstantin K. Semenov, Vladik Kreinovich, and Leon Reznik, “Measurement’s result and its error as fuzzy variables: background and perspectives”, *Key Engineering Materials*, 2010, Vol. 437, pp. 487–491.

Vladik Kreinovich and Gang Xiang, “Estimating information amount under uncertainty: algorithmic solvability and computational complexity”, *International Journal of General Systems*, 2010, Vol. 39, No. 4, pp. 349–378.

Vladik Kreinovich, Hung T. Nguyen, and Songsak Sriboonchitta, “Estimating Risk under Interval Uncertainty: Sequential and Parallel Algorithms”, *International Journal of Intelligent Technologies and Applied Statistics*, 2010, Vol. 3, No. 1, pp. 57–70.

Irina Perfilieva and Vladik Kreinovich, “A Broad Prospective on Fuzzy Transforms: From Gauging Accuracy of Quantity Estimates to Gauging Accuracy and Resolution of Measuring Physical Fields”, *Neural Network World*, 2010, Vol. 20, No. 1, pp. 7–25.

Guoqing Liu and Vladik Kreinovich, “Fast Convolution and Fast Fourier Transform under Interval and Fuzzy Uncertainty”, *Journal of Computer and System Sciences*, 2010, Vol. 76, No. 1, pp. 63–76.

Vladik Kreinovich, “ ‘Weird’ Fuzzy Notations: An Algebraic Interpretation”, *Applied Mathematical Sciences*, 2010, Vol. 4, No. 9, pp. 431–434.

Olga Kosheleva and Vladik Kreinovich, “What is the Best Way to Distribute Efforts Among Students: Towards Quantitative Approach”, *Applied Mathematical Sciences*, 2010, Vol. 4, No. 9, pp. 417–429.

Eulalia Szmidt and Vladik Kreinovich, “Symmetry Between True, False, and Uncertain: An Explanation”, *Notes on Intuitionistic Fuzzy Sets*, 2009, Vol. 15, No. 4, pp. 1–8.

Boglárka G.-Tóth and Vladik Kreinovich, “Verified methods for computing Pareto sets: general algorithmic analysis”, *International Journal of Applied Mathematics and Computer Science AMCS*, 2009, Vol. 19, No. 3, pp. 369–380.

Hung T. Nguyen, Olga Kosheleva, Vladik Kreinovich, and Scott Ferson, “Trade-Off Between Sample Size and Accuracy: Case of Measurements under Interval Uncertainty”, *International Journal of Approximate Reasoning*, 2009, Vol. 50, No. 8, pp. 1164–1176.

Vladik Kreinovich, “Any (True) Statement Can Be Generalized So That It Becomes Trivial: A Simple Formalization of D. K. Faddeev’s Belief”, *Applied Mathematical Sciences*, 2009, Vol. 3, No. 47, pp. 2343–2347.

O. Kosheleva and V. Kreinovich, “Guesstimation: A New Justification of the Geometric Mean Heuristic”, *Applied Mathematical Sciences*, 2009, Vol. 3, No. 47, pp. 2335–2342.

Olga Kosheleva and Vladik Kreinovich, “Egyptian Fractions Revisited”, *Informat-ics in Education*, 2009, Vol. 8, No. 1, pp. 35–48.

Vladik Kreinovich, “Toward Formalizing Non-Monotonic Reasoning in Physics: the Use of Kolmogorov Complexity”, *Revista Iberoamericana de Inteligencia Artificial*, 2009, Vol. 41, pp. 4–20.

Vladik Kreinovich, Hung T. Nguyen, and Songsak Sriboonchitta, “A New Justification of Wang Transform Operator in Financial Risk Analysis”, *International Journal of Intelligent Technologies and Applied Statistics*, 2009, Vol. 2, No. 1, pp. 45–57.

Songsak Sriboonchitta and Vladik Kreinovich, “Asymmetric Heteroskedasticity Models: A New Justification”, *International Journal of Intelligent Technologies and Applied Statistics*, 2009, Vol. 2, No. 1, pp. 1–12.

Jan Beck, David Nemir, and Vladik Kreinovich, “Mathematical Justification of Spectral/Covariance Techniques: On the Example of Arc Detection”, *Applied Mathematical Sciences*, 2009, Vol. 3, No. 22, pp. 1081–1089.

Tanja Magoč and Vladik Kreinovich, “A Paradox of Altruism: How Caring about Future Generations Can Result in Poverty for Everyone (Game-Theoretic Analysis)”, *Applied Mathematical Sciences*, 2009, Vol. 3, No. 22, pp. 1091–1096.

Tanja Magoč and Vladik Kreinovich, “A New Simplified Derivation of Nash Bargaining Solution”, *Applied Mathematical Sciences*, 2009, Vol. 3, No. 22, pp. 1097–1101.

Hung T. Nguyen, Olga Kosheleva, and Vladik Kreinovich, “Decision Making Beyond Arrow’s ‘Impossibility Theorem’, With the Analysis of Effects of Collusion and Mutual Attraction”, *International Journal of Intelligent Systems*, 2009, Vol. 24, No. 1, pp. 27–47.

Ruey L. Cheu, Hung T. Nguyen, Tanja Magoc, and Vladik Kreinovich, “Logit Discrete Choice Model: A New Distribution-Free Justification”, *Soft Computing*, 2009, Vol. 13, No. 2, pp. 133–137.

Vladik Kreinovich and Maurice Margenstern, “In Some Curved Spaces, One Can Solve NP-Hard Problems in Polynomial Time”, *Notes of Mathematical Seminars of St. Petersburg Department of Steklov Institute of Mathematics*, 2008, Vol. 358, pp. 224–250; reprinted in *Journal of Mathematical Sciences*, 2009, Vol. 158, No. 5, pp. 727–740.

Olga Kosheleva and Vladik Kreinovich, “On chromatic numbers of space-times: open problems”, *Geoinformatics*, 2009, Vol. 19, No. 1, pp. 14–17.

Vladik Kreinovich, Arnold Neumaier, and Gang Xiang, “Towards a Combination of Interval and Ellipsoid Uncertainty”, *Computational Technologies*, 2008, Vol. 13, No. 6, pp. 5–16.

Vladik Kreinovich, “Application-motivated combinations of fuzzy, interval, and probability approaches, and their use in geoinformatics, bioinformatics, and engineering”, *International Journal of Automation and Control (IJAAC)*, 2008, Vol. 2, No. 2/3, pp. 317–339.

H. T. Nguyen, V. Kreinovich, and E. Kamoroff, “Asymmetric Information Measures: How to Extract Knowledge From an Expert So That the Expert’s Effort is Minimal”, *International Journal of Automation and Control (IJAAC)*, 2008, Vol. 2, No. 2/3, pp. 153–177.

Sa-aat Niwitpong, Hung T. Nguyen, Ingo Neumann, and Vladik Kreinovich, “Hypothesis testing with interval data: case of regulatory constraints”, *International Journal of Intelligent Technologies and Applied Statistics*, 2008, Vol. 1, No. 2, pp. 19–41.

Vladik Kreinovich and Olga Kosheleva, “From (Idealized) Exact Causality-Preserving Transformations to Practically Useful Approximately-Preserving Ones: A General Approach”, *International Journal of Theoretical Physics*, 2008, Vol. 47, No. 4, pp. 1083–1091.

Luc Longpré and Vladik Kreinovich, “When Are Two Wave Functions Distinguishable: A New Answer to Pauli’s Question, with Potential Application to Quantum Cosmology”, *International Journal of Theoretical Physics*, 2008, Vol. 47, No. 3, pp. 814–831.

Vladik Kreinovich, “Equidecomposability (scissors congruence) of polyhedra in R^3 and R^4 is algorithmically decidable: Hilbert’s 3rd Problem revisited”, *Geombinatorics*, 2008, Vol. 18, No. 1, pp. 26–34.

Vladik Kreinovich and Olga Kosheleva, “Computational Complexity of Determining Which Statements about Causality Hold in Different Space-Time Models”, *Theoretical Computer Science*, 2008, Vol. 405, No. 1–2, pp. 50–63.

Hans-Peter A. Künzi and Vladik Kreinovich, “Static Space-Times Naturally Lead to Quasi-Pseudometrics”, *Theoretical Computer Science*, 2008, Vol. 405, No. 1–2, pp. 64–72.

Leon Reznik and Vladik Kreinovich, “Fuzzy prediction models in measurement”, *IEEE Transactions on Fuzzy Systems*, 2008, Vol. 16, No. 4, pp. 851–862.

Vladik Kreinovich, Hung T. Nguyen, and Sa-aat Niwitpong, “Statistical Hypothesis Testing Under Interval Uncertainty: An Overview”, *International Journal of Intelligent Technologies and Applied Statistics*, 2008, Vol. 1, No. 1, pp. 1–32.

Luc Longpré, Vladik Kreinovich, William Gasarch, and G. William Walster, “ m Solutions Good, $m - 1$ Solutions Better”, *Applied Math. Sciences*, 2008, Vol. 2, No. 5, pp. 223–239.

Vladik Kreinovich, “Why Intervals? Why Fuzzy Numbers? Towards a New Justification”, *International Journal of Information Technology and Intelligent Computing*, 2007, Vol. 2, No. 1.

Gang Xiang, Martine Ceberio, and Vladik Kreinovich, “Computing Population Variance and Entropy under Interval Uncertainty: Linear-Time Algorithms”, *Reliable Computing*, 2007, Vol. 13, No. 6, pp. 467–488.

Daniel Berleant, Martine Ceberio, Gang Xiang, and Vladik Kreinovich, “Towards Adding Probabilities and Correlations to Interval Computations”, *International Journal of Approximate Reasoning*, 2007, Vol. 46, No. 3, pp. 499–510.

Vladik Kreinovich, “Towards a More Physically Adequate Definition of Randomness: A Topological Approach”, *Journal of Uncertain Systems*, 2007, Vol. 1, No. 4, pp. 256–266.

Ronald R. Yager and Vladik Kreinovich, “Entropy Conserving Probability Transforms and the Entailment Principle”, *Fuzzy Sets and Systems*, 2007, Vol. 158, No. 12, pp. 1397–1405.

Christodoulos A. Floudas and Vladik Kreinovich, “On the Functional Form of Convex Underestimators for Twice Continuously Differentiable Functions”, *Optimization Letters*, 2007, Vol. 1, No. 2, pp. 187–192.

Matthew G. Averill, Kate C. Miller, G. Randy Keller, Vladik Kreinovich, Roberto Araiza, and Scott A. Starks, “Using Expert Knowledge in Solving the Seismic Inverse Problem”, *International Journal of Approximate Reasoning*, 2007, Vol. 45, No. 3, pp. 564–587.

Vladik Kreinovich, Hung T. Nguyen, and Berlin Wu, “On-Line Algorithms for Computing Mean and Variance of Interval Data, and Their Use in Intelligent Systems”, *Information Sciences*, 2007, Vol. 177, No. 16, pp. 3228–3238.

John Symons, Julio C. Urenda, and Vladik Kreinovich, “Towards a General Description of Physical Invariance in Category Theory”, *Journal of Uncertain Systems*, 2007, Vol. 1, No. 3, pp. 201–205.

Martine Ceberio, Scott Ferson, Vladik Kreinovich, Sanjeev Chopra, Gang Xiang, Adrian Murguia, and Jorge Santillan, “How To Take Into Account Dependence Between the Inputs: From Interval Computations to Constraint-Related Set Computations, with Potential Applications to Nuclear Safety, Bio- and Geosciences”, *Journal of Uncertain Systems*, 2007, Vol. 1, No. 1, pp. 11–34.

Scott Ferson, Lev Ginzburg, Vladik Kreinovich, and Jorge Lopez, “Absolute Bounds on the Mean of Sum, Product, etc.: A Probabilistic Extension of Interval Arithmetic”, *Applied Mathematical Sciences*, 2007, Vol. 1, No. 9, pp. 395–440.

Daniel J. Berleant, Olga Kosheleva, Vladik Kreinovich, and Hung T. Nguyen, “Unimodality, Independence Lead to NP-Hardness of Interval Probability Problems”, *Reliable Computing*, 2007, Vol. 13, No. 3, pp. 261–282.

Vladik Kreinovich, Jan Beck, and Hung T. Nguyen, “Ellipsoids and Ellipsoid-Shaped Fuzzy Sets as Natural Multi-Variate Generalization of Intervals and Fuzzy Numbers: How to Elicit Them from Users, and How to Use Them in Data Processing”, *Information Sciences*, 2007, Vol. 177, No. 2, pp. 388–407.

Vladik Kreinovich, Olga Kosheleva, Scott A. Starks, Kavitha Tupelly, Graçaliz P. Dimuro, Antônio Carlos da Rocha Costa, and Karen Villaverde, “From Intervals to Domains: Towards a General Description of Validated Uncertainty, with Potential Applications to Geospatial and Meteorological Data”, *Journal of Computational and Applied Mathematics*, 2007, Vol. 199, No. 2, pp. 411–417.

Vladik Kreinovich, Luc Longpré, Scott A. Starks, Gang Xiang, Jan Beck, Raj Kandathi, Asis Nayak, Scott Ferson, and Janos Hajagos, “Interval Versions of Statistical Techniques, with Applications to Environmental Analysis, Bioinformatics, and Privacy in Statistical Databases”, *Journal of Computational and Applied Mathematics*, 2007, Vol. 199, No. 2, pp. 418–423.

Martine Ceberio, Vladik Kreinovich, Sanjeev Chopra, Luc Longpré, Hung T. Nguyen, Bertram Ludäscher, and Chitta Baral, “Interval-Type and Affine Arithmetic-Type Techniques for Handling Uncertainty in Expert Systems”, *Journal of Computational and Applied Mathematics*, 2007, Vol. 199, No. 2, pp. 403–410.

V. Kreinovich, J. Beck, C. Ferregut, A. Sanchez, G. R. Keller, M. Averill, and S. A. Starks, “Monte-Carlo-type techniques for processing interval uncertainty, and their potential engineering applications”, *Reliable Computing*, 2007, Vol. 13, No. 1, pp. 25–69.

Scott A. Starks, Olga Kosheleva, and Vladik Kreinovich, “Kaluza-Klein 5D Ideas Made Fully Geometric”, *International Journal of Theoretical Physics*, 2006, Vol. 45, No. 3, pp. 589–601.

Vladik Kreinovich, “Strong equivalence principle contradicts to observations”, *Gravitacija* (in Russian; to appear).

Vladik Kreinovich, “On the influence of cosmology on celestial mechanical effects”, *Gravitacija* (in Russian; to appear).

Vladik Kreinovich and Max Shpak, “Aggregability is NP-Hard”, *ACM SIGACT News*, 2006, Vol. 37, No. 3, pp. 97–104.

Vladik Kreinovich, Gang Xiang, and Scott Ferson, “Computing Mean and Variance Under Dempster-Shafer Uncertainty: Towards Faster Algorithms”, *International Journal of Approximate Reasoning*, 2006, Vol. 42, pp. 212–227.

Jerry Hobbs and Vladik Kreinovich, “Optimal Choice of Granularity In Commonsense Estimation: Why Half-Orders of Magnitude”, *International Journal of Intelligent Systems*, 2006, Vol. 21, No. 8, pp. 843–855.

V. Kreinovich, G. Xiang, S. A. Starks, L. Longpré, M. Ceberio, R. Araiza, J. Beck, R. Kandathi, A. Nayak, R. Torres, and J. Hajagos, “Towards combining probabilistic and interval uncertainty in engineering calculations: algorithms for computing statistics under interval uncertainty, and their computational complexity”, *Reliable Computing*, 2006, Vol. 12, No. 6, pp. 471–501.

Richard Aló, Vladik Kreinovich, and Scott A. Starks, “Testing Hypotheses on Simulated Data: Why Traditional Hypotheses-Testing Statistics Are Not Always Adequate for Simulated Data, and How to Modify Them”, *Journal of Advanced Computational Intelligence and Intelligent Informatics*, 2006, Vol. 10, No. 3, pp. 260–264.

Anthony P. Salvatore, Amitava Biswas, Vladik Kreinovich, Bertha Manriquez, Michael P. Cannito, and Robert J. Sinard, “Expert System-Type Approach to Voice Disorders: Scheduling Botulinum Toxin Treatment for Adductor Spasmodic Dysphonia”, *Journal of Advanced Computational Intelligence and Intelligent Informatics*, 2006, Vol. 10, No. 3, pp. 332–338.

Vladik Kreinovich and Siegfried Rump, “Towards Optimal Use of Multi-Precision Arithmetic: A Remark”, *Reliable Computing*, 2006, Vol. 12, No. 5, pp. 365–369.

Vladik Kreinovich and Scott Ferson, “Computing Best-Possible Bounds for the Distribution of a Sum of Several Variables is NP-Hard”, *International Journal of Approximate Reasoning*, 2006, Vol. 41, pp. 331–342.

Evgeny Dantsin, Vladik Kreinovich, Alexander Wolpert, and Gang Xiang, “Population Variance under Interval Uncertainty: A New Algorithm”, *Reliable Computing*, 2006, Vol. 12, No. 4, pp. 273–280.

Vladik Kreinovich and Hung T. Nguyen, “Which Fuzzy Logic Is the Best: Pragmatic Approach (and Its Theoretical Analysis)”, *Fuzzy Sets and Systems*, 2006, Vol. 157, pp. 611–614.

Evgeny Dantsin, Vladik Kreinovich, and Alexander Wolpert, “On Quantum Versions of Record-Breaking Algorithms for SAT”, *ACM SIGACT News*, 2005, Vol.

36, No. 4, pp. 103–108.

R. Baker Kearfott and Vladik Kreinovich, “Beyond Convex? Global Optimization Is Feasible Only for Convex Objective Functions: A Theorem”, *Journal of Global Optimization*, 2005, Vol. 33, No. 4, pp. 617–624.

Cliff Joslyn and Vladik Kreinovich, “Convergence Properties of an Interval Probabilistic Approach to System Reliability Estimation”, *International Journal of General Systems*, 2005, Vol. 34, No. 4, pp. 465–482.

Vladik Kreinovich and Scott Ferson, “Why Product of Probabilities (Masses) for Independent Events? A Remark”, *International Journal of Pure and Applied Mathematics*, 2005, Vol. 22, No. 3, pp. 341–347.

Inna Pivkina and Vladik Kreinovich, “Minimality of Solution Update in Conflict Resolution: An Application of Revision Programming to von Neumann-Morgenstern Approach”, *International Journal of Intelligent Systems*, 2005, Vol. 20, No. 9, pp. 939–956.

Vladik Kreinovich and Luc Longpré, “Kolmogorov Complexity Leads to a Representation Theorem for Idempotent Probabilities (σ -Maxitive Measures)”, *ACM SIGACT News*, 2005, Vol. 36, No. 3, pp. 107–112.

Boguslaw Stec and Vladik Kreinovich, “Geometry of protein structures. I. Why hyperbolic surfaces are a good approximation for beta-sheets”, *Geoinformatics*, 2005, Vol. 15, No. 1, pp. 18–27.

Vladik Kreinovich, “Optimal Finite Characterization of Linear Problems with Inexact Data”, *Reliable Computing*, 2005, Vol. 11, No. 6, pp. 479–489.

Kavitha Tupelly, Vladik Kreinovich, and Karen Villaverde, “Checking if There Exists a Monotonic Function That Is Consistent with the Measurements: An Efficient Algorithm”, *Reliable Computing*, 2005, Vol. 11, No. 4, pp. 291–312.

Scott Ferson, Lev Ginzburg, Vladik Kreinovich, Luc Longpré, and Monica Aviles, “Exact Bounds on Finite Populations of Interval Data”, *Reliable Computing*, 2005, Vol. 11, No. 3, pp. 207–233.

Vladik Kreinovich, Luc Longpré, Praveen Patangay, Scott Ferson, and Lev Ginzburg, “Outlier Detection Under Interval Uncertainty: Algorithmic Solvability and Computational Complexity”, *Reliable Computing*, 2005, Vol. 11, No. 1, pp. 59–76.

Vladik Kreinovich and Andrei M. Finkelstein, “Towards Applying Computational Complexity to Foundations of Physics”, *Notes of Mathematical Seminars of St. Petersburg Department of Steklov Institute of Mathematics*, 2004, Vol. 316, pp. 63–110; reprinted in *Journal of Mathematical Sciences*, 2006, Vol. 134, No. 5, pp. 2358–2382.

Vladik Kreinovich, Eric J. Pauwels, Scott Ferson, and Lev Ginzburg, “A Feasible Algorithm for Locating Concave and Convex Zones of Interval Data and Its Use in Statistics-Based Clustering”, *Numerical Algorithms*, 2004, Vol. 37, pp. 225–232.

Jürgen Wolff von Gudenberg and Vladik Kreinovich, “A Full Function-Based Calculus of Directed and Undirected Intervals: Markov’s Interval Arithmetic Revisited”, *Numerical Algorithms*, 2004, Vol. 37, pp. 417–428.

Bharat C. Mulupuru, Vladik Kreinovich, and Roberto Osegueda, “Interval Approach to Phase Measurements Can Lead to Arbitrarily Complex Sets – A Theorem and Ways Around It”, *Numerical Algorithms*, 2004, Vol. 37, pp. 285–299.

Nedialko S. Nedialkov, Vladik Kreinovich, and Scott A. Starks, “Interval Arithmetic, Affine Arithmetic, Taylor Series Methods: Why, What Next?”, *Numerical Algorithms*, 2004, Vol. 37, pp. 325–336.

Roberto Osegueda, Vladik Kreinovich, Enrique Roldan, and Rodrigo Mares, “Detecting cracks in thin plates by using Lamb wave scanning: geometric approach”, *Geoinformatics*, 2004, Vol. 14, No. 2, pp. 62–71.

Vladik Kreinovich, “Probabilities, Intervals, What Next? Optimization Problems Related to Extension of Interval Computations to Situations with Partial Information about Probabilities”, *Journal of Global Optimization*, 2004, Vol. 29, No. 3, pp. 265–280.

Vladik Kreinovich and Luc Longpré, “Fast Quantum Algorithms for Handling Probabilistic and Interval Uncertainty”, *Mathematical Logic Quarterly*, 2004, Vol. 50, No. 4/5, pp. 507–518.

Vladik Kreinovich and Scott Ferson, “A New Cauchy-Based Black-Box Technique for Uncertainty in Risk Analysis”, *Reliability Engineering and Systems Safety*, 2004, Vol. 85, No. 1–3, pp. 267–279.

Roberto Torres, G. Randy Keller, Vladik Kreinovich, Luc Longpré, and Scott A. Starks, “Eliminating Duplicates Under Interval and Fuzzy Uncertainty: An Asymptotically Optimal Algorithm and Its Geospatial Applications”, *Reliable Computing*, 2004, Vol. 10, No. 5, pp. 401–422.

Martine Ceberio and Vladik Kreinovich, “Greedy Algorithms for Optimizing Multivariate Horner Schemes”, *ACM SIGSAM Bulletin*, 2004, Vol. 38, No. 1 (147), pp. 8–15.

Martine Ceberio and Vladik Kreinovich, “Fast Multiplication of Interval Matrices (Interval Version of Strassen’s Algorithm)”, *Reliable Computing*, 2004, Vol. 10, No. 3, pp. 241–243.

Hung T. Nguyen, Vladik Kreinovich, and Luc Longpré, “Dirty Pages of Logarithm Tables, Lifetime of the Universe, and (Subjective) Probabilities on Finite and Infinite Intervals”, *Reliable Computing*, 2004, Vol. 10, No. 2, pp. 83–106.

Vilém Novák, Irina Perfilieva, Hung T. Nguyen, and Vladik Kreinovich, “Research on Advanced Soft Computing and Its Applications”, *Soft Computing*, 2004, Vol. 8, No. 4, pp. 239–246.

Vladik Kreinovich, “Towards More Realistic (e.g., Non-Associative) ‘and’- and ‘or’-Operations in Fuzzy Logic”, *Soft Computing*, 2004, Vol. 8, No. 4, pp. 274–280.

Vladik Kreinovich and Scott A. Starks, “Why benchmarking is an (asymptotically) optimal approach to numerical methods: a geombinatoric proof”, *Geombinatorics*, 2004, Vol. 13, No. 3, pp. 131–138.

Vladik Kreinovich, Hung T. Nguyen, Nadipuram S. Prasad, and Pratit Santiprabhob, “Intelligent Technologies (Introduction to the Special Issue)”, *International Journal of Intelligent Systems*, 2004, Vol. 19, No. 1/2, pp. 1–8.

Vladik Kreinovich and Chin-Wang Tao, “Checking Identities Is Computationally Intractable (NP-Hard), So Human Provers Will Be Always Needed”, *International Journal of Intelligent Systems*, 2004, Vol. 19, No. 1/2, pp. 39–49.

Ronald R. Yager and Vladik Kreinovich, “On the Relation Between Two Approaches to Combining Evidence: Ordered Abelian Groups and Uninorms”, *Journal of Intelligent and Fuzzy Systems*, 2003, Vol. 14, No. 1, pp. 7–12.

Ronald R. Yager and Vladik Kreinovich, “Universal Approximation Theorem for Uninorm-Based Fuzzy Systems Modeling”, *Fuzzy Sets and Systems*, 2003, Vol. 140, No. 2, pp. 331–339.

Vladik Kreinovich, Scott A. Starks, Dima Iourinski, Olga Kosheleva, and Andrei Finkelstein, “Open-ended configurations of radio telescopes: a geometrical analysis”, *Geombinatorics*, 2003, Vol. 13, No. 2, pp. 79–85.

Hung T. Nguyen, Vladik Kreinovich, and Antonio Di Nola, “Which Truth Values in Fuzzy Logics Are Definable?”, *International Journal of Intelligent Systems*, 2003, Vol. 18, No. 10, pp. 1057–1064.

Hongjie Xie, Nigel Hicks, G. Randy Keller, Haitao Huang, and Vladik Kreinovich, “An IDL/ENVI implementation of the FFT based algorithm for automatic image registration”, *Computers and Geosciences*, 2003, Vol. 29, No. 8, pp. 1045–1055.

Vladik Kreinovich, Scott Ferson, and Lev Ginzburg, “Exact Upper Bound on the Mean of the Product of Many Random Variables With Known Expectations”, *Reliable Computing*, 2003, Vol. 9, No. 6, pp. 441–463.

Vladik Kreinovich, Luc Longpré, and James J. Buckley, “Are There Easy-to-Check Necessary and Sufficient Conditions for Straightforward Interval Computations to Be Exact?”, *Reliable Computing*, 2003, Vol. 9, No. 5, pp. 349–358.

William G. Walster and Vladik Kreinovich, “Computational complexity of crude range estimation and fuzzy optimization”, *Fuzzy Sets and Systems*, 2003, Vol. 135, No. 1, pp. 179–208; correction 2004, Vol. 141, p. 163.

Götz Alefeld, Vladik Kreinovich, and Günter Mayer, “On the Solution Sets of Particular Classes of Linear Interval Systems” *Journal of Computational and Applied Mathematics*, 2003, Vol. 152, No. 1/2, pp. 1–15.

Luc Longpré and Vladik Kreinovich, “Can Quantum Computers Be Useful When There Are Not Yet Enough Qubits?”, *Bulletin of the European Association for Theoretical Computer Science (EATCS)*, 2003, Vol. 79, pp. 164–169.

Vladik Kreinovich and Isaak A. Kunin, “Kolmogorov Complexity and Chaotic Phenomena”, *International Journal of Engineering Science*, 2003, Vol. 41, No. 3–5, pp. 483–493.

V. G. Knorring, Y. Ya. Kreinovich, and V. D. Mazin, “Measurement Information: Scales and Conversions”, *Measurement Techniques*, 2002, Vol. 45. No. 2, pp. 113–115 (Russian version February 2002, pp. 3–4).

Hung T. Nguyen and Vladik Kreinovich, “From [0,1]-Based Logic To Interval Logic (From known description of all possible [0,1]-based logical operations to a description of all possible interval-based logical operations)”, *Notes on Intuitionistic Fuzzy Sets*, 2002, Vol. 8, No. 3, pp. 75–94.

Daniel E. Cooke, Vladik Kreinovich, and Joseph E. Urban, “Designing interdisciplinary approaches to problem solving into computer languages”, *Journal of Integrated Design & Process Science*, 2002, Vol. 6, No. 3, pp. 29–43.

Vladik Kreinovich and Richard Aló, “Interval Mathematics for Analysis of Multi-Level Granularity”, *Archives of Control Sciences*, 2002, Vol. 12, No. 4, pp. 323–350.

Irina Perfilieva and Vladik Kreinovich, “A New Universal Approximation Result For Fuzzy Systems, Which Reflects CNF–DNF Duality”, *International Journal of Intelligent Systems*, 2002, Vol. 17. No. 12, pp. 1121–1130.

Vladik Kreinovich and Dima Iourinski, “Was there Satan’s face in the World Trade Center fire? A geometric analysis”, *Geombinatorics*, 2002, Vol. 12, No. 2, pp. 69–75.

Vladik Kreinovich, “Range Estimation Is NP-Hard For ε^2 Accuracy and Feasible For $\varepsilon^{2-\delta}$ ”, *Reliable Computing*, 2002, Vol. 8, No. 6, pp. 481–491.

Vladik Kreinovich, Luc Longpré, Scott Ferson, and Lev Ginzburg, “Why Is Selecting the Simplest Hypothesis (Consistent with Data) a Good Idea? A Simple Explanation”, *Bulletin of the European Association for Theoretical Computer Science (EATCS)*, 2002, Vol. 77, pp. 191–194.

Scott Ferson, Lev Ginzburg, Vladik Kreinovich, Luc Longpré, and Monica Aviles, “Computing Variance for Interval Data is NP-Hard”, *ACM SIGACT News*, 2002, Vol. 33, No. 2, pp. 108–118.

Scott A. Starks and Vladik Kreinovich, “Aerospace applications of soft computing and interval computations (with an emphasis on simulation and modeling),” *Systems Analysis Modelling Simulation*, 2002, Vol. 42, No. 5, pp. 713–734.

Brian d’Auriol, Vladik Kreinovich, Bindu George, Florence Muganda, and Pramod Kumar Chikkappaiah, “What Is the Best Way To Draw a Cube?”, *Geombinatorics*, 2002, Vol. 11, No. 4, pp. 105–110.

Gerhard Heindl, Vladik Kreinovich, and Maria Rifqi, “In case of interval (or more general) uncertainty, no algorithm can choose the simplest representative”, *Reliable Computing*, 2002, Vol. 8, No. 3, pp. 213–227.

Raúl Trejo and Vladik Kreinovich, “Computing the Shape of the Image of a Multi-Linear Mapping Is Possible But Computationally Intractable: Theorems”, *International Journal of General Systems*, 2002, Vol. 31, No. 1, pp. 17–27.

Daniel E. Cooke and Vladik Kreinovich, “Automatic Concurrency in SequenceL”, *Science of Computer Programming*, 2002, Vol. 42, No. 1, pp. 115–128.

Raúl Trejo, Vladik Kreinovich, I. R. Goodman, Jesus Martinez, and Reginaldo Gonzalez, “A Realistic (Non-Associative) Logic And a Possible Explanations of 7 ± 2 Law”, *International Journal of Approximate Reasoning*, 2002, Vol. 29, pp. 235–266.

Roberto A. Osegueda, Seetharami R. Seelam, Ana C. Holguin, Vladik Kreinovich, and Chin-Wang Tao, “Statistical and Dempster-Shafer Techniques in Testing Structural Integrity of Aerospace Structures”, *International Journal of Uncertainty, Fuzziness, Knowledge-Based Systems (IJUFKS)*, 2001, Vol. 9, No. 6, pp. 749–758.

Raúl A. Trejo, Joel Galloway, Charanjiv Sachar, Vladik Kreinovich, Chitta Baral, and Le Chi Tuan, “From Planning to Searching for the Shortest Plan: An Optimal Transition”, *International Journal of Uncertainty, Fuzziness, Knowledge-Based Systems (IJUFKS)*, 2001, Vol. 9, No. 6, pp. 827–838.

Vladik Kreinovich and Scott A. Starks, “Aerospace applications of intervals: from geospatial data processing to fault detection in aerospace structures”, *International Journal of Uncertainty, Fuzziness, Knowledge-Based Systems (IJUFKS)*, 2001, Vol. 9, No. 6, pp. 721–730.

Vladik Kreinovich and Tibor Csendes, “Theoretical Justification of a Heuristic Subbox Selection Criterion”, *Central European Journal of Operations Research CEJOR*, 2001, Vol. 9, No. 3, pp. 255–265.

Nhu Nguyen, Hung T. Nguyen, Berlin Wu, Vladik Kreinovich, and Guoqing Liu, “Chu Spaces: Towards New Foundations for Fuzzy Logic and Fuzzy Control, with Applications to Information Flow on the World Wide Web”, *Journal of Advanced Computational Intelligence and Intelligent Informatics (JACIII)*, 2001, Vol. 5, No. 3, pp. 149–156.

Nguyen Hoang Phuong and Vladik Kreinovich, “Fuzzy logic and its applications in medicine”, *International Journal of Medical Informatics*, 2001, Vol. 62, No. 2–3, pp. 165–173.

Edward Vidal, Luc Longpré, Vladik Kreinovich, and Huang Haitao, “Geombinatorics of Smart Dust”, *Geombinatorics*, 2001, Vol. 11, No. 2, pp. 54–58.

Jan Beck, Vladik Kreinovich, and Brian Penn, “Geombinatoric aspects of processing large images and large spatial databases”, *Geombinatorics*, 2001, Vol. 11, No. 1, pp. 6–12.

Frank Harary, Vladik Kreinovich, and Luc Longpré, “A new graph characteristic and its application to numerical computability”, *Information Processing Letters*, 2001, Vol. 77, No. 5–6, pp. 277–282.

I. R. Goodman and Vladik Kreinovich, “On Representation and Approximation of Operations in Boolean Algebras”, *International Journal of Intelligent Systems*, 2001, Vol. 16, pp. 647–653.

Ann Q. Gates and Vladik Kreinovich, “Strassen’s Algorithm Made (Somewhat) More Natural: A Pedagogical Remark”, *Bulletin of the European Association for Theoretical Computer Science (EATCS)*, 2001, Vol. 73, pp. 142–145.

Keith Worden, Roberto Osegueda, Carlos Ferregut, Soheil Nazarian, Debra L. George, Mary J. George, Vladik Kreinovich, Olga Kosheleva and Sergio Cabrera, “Interval Methods in Non-Destructive Testing of Material Structures”, *Reliable Computing*, 2001, Vol. 7, No. 4, pp. 341–352.

Götz Alefeld, Vladik Kreinovich, Günter Mayer, and Michael Huth, “A Comment on Shape of the Solution Set for Systems of Interval Linear Equations with Dependent Coefficients”, *Reliable Computing*, 2001, Vol. 7, No. 3, pp. 275–277.

Vladik Kreinovich, “Itanium’s New Basic Operation of Fused Multiply-Add: Theoretical Explanation and Theoretical Challenge”, *ACM SIGACT News*, 2001, Vol. 32, No. 1 (118), pp. 115–117.

Matthew Barry and Vladik Kreinovich, “Which sensor set is better for monitoring spacecraft subsystems? A geometric answer and its probabilistic generalization”, *Geoinformatics*, 2001, Vol. X, No. 3, pp. 96–102.

Vladik Kreinovich, “Roundoff-Free Number Fields For Interval Computations”, *Reliable Computing*, 2001, Vol. 7, No. 1, pp. 41–47.

Vladik Kreinovich, “Allowing Two Moves in Succession Increases the Game’s Bias: a Theorem”, *International Journal of Intelligent Systems*, 2001, Vol. 16, No. 1, pp. 209–213.

Vladik Kreinovich and Yeung Yam, “Why Clustering in Function Approximation? Theoretical Explanation”, *International Journal of Intelligent Systems*, 2000, Vol. 15, No. 10, pp. 959–966.

Ronald R. Yager and Vladik Kreinovich, “Fair Division Under Interval Uncertainty”, *International Journal of Uncertainty, Fuzziness, Knowledge-Based Systems (IJUFKS)*, 2000, Vol. 8, No. 5, pp. 611–618.

Chitta Baral, Vladik Kreinovich, and Raúl Trejo, “Computational Complexity of Planning and Approximate Planning in the Presence of Incompleteness”, *Artificial Intelligence*, 2000, Vol. 122, pp. 241–267.

Daniel E. Cooke and Vladik Kreinovich, “Automatic Concurrency in SequenceL”, *Electronic Notes in Theoretical Computer Science*, 2000, Vol. 25.

Murali Siddaiah, Michael A. Lieberman, Nadipuram R. Prasad, and Vladik Kreinovich, “A geometric approach to classification of trash in ginned cotton”, *Geoinformatics*, 2000, Vol. 10, No. 2, pp. 77–82.

Vladik Kreinovich and Juergen Wolff von Gudenberg, “An optimality criterion for arithmetic of complex sets”, *Geombinatorics*, 2000, Vol. 10, No. 1, pp. 31–37.

Vladik Kreinovich and Luc Longpré, “How Important Is Theory for Practical Problems? A Partial Explanation of Hartmanis’ Observation”, *Bulletin on the European Association for Theoretical Computer Science EATCS*, 2000, Vol. 71, pp. 160–164.

Vladik Kreinovich and Nadipuram R. Prasad, “The Use of Fuzzy Measures in Pain Relief Control”, *Biomedical Soft Computing and Human Sciences*, 2000, Vol. 5, No. 2, pp. 23–30.

Vladik Kreinovich, Hung T. Nguyen, and Yeung Yam, “Fuzzy Systems Are Universal Approximators for a Smooth Function And Its Derivatives”, *International Journal of Intelligent Systems*, 2000, Vol. 15, No. 6, pp. 565–574.

Raúl A. Trejo, Vladik Kreinovich, and Luc Longpré, “Choosing a Physical Model: Why Symmetries?”, *Bulletin of the European Association for Theoretical Computer Science (EATCS)*, 2000, Vol. 70, pp. 159–161.

Takeshi Yamakawa and Vladik Kreinovich, “Why Fundamental Physical Equations Are of Second Order?”, *International Journal of Theoretical Physics*, 1999, Vol. 38, No. 6, pp. 1763–1770.

Mai Gehrke, Vladik Kreinovich, and Bernadette Bouchon-Meunier, “Propositional Fuzzy Logics: Decidable for Some (Algebraic) Operators, Undecidable for More Complicated Ones”, *International Journal of Intelligent Systems*, 1999, Vol. 14, No. 9, pp. 935–947.

Vladik Kreinovich, Masao Mukaidono, and Krassimir Atanassov, “From Fuzzy Values To Intuitionistic Fuzzy Values To Intuitionistic Fuzzy Intervals etc.: Can We Get an Arbitrary Ordering?”, *Notes on Intuitionistic Fuzzy Sets (NIFS)*, 1999, Vol. 5, No. 3, pp. 11–18.

Hung T. Nguyen, Vladik Kreinovich, and Berlin Wu, “Fuzzy/probability \sim fractal/smooth”, *International Journal of Uncertainty, Fuzziness, and Knowledge-Based Systems (IJUFKS)*, 1999, Vol. 7, No. 4, pp. 363–370.

Misha Koshelev, Vladik Kreinovich, and Luc Longpré, “Encryption Algorithms Made Natural”, *Inroads: ACM SIGCSE Bulletin*, 1999, Vol. 31, No. 4, pp. 50–51.

Vladik Kreinovich, Hung T. Nguyen, and Berlin Wu, “Justification of Heuristic Methods in Data Processing Using Fuzzy Theory, with Applications to Detection of Business Cycles From Fuzzy Data”, *East-West Journal of Mathematics*, 1999, Vol. 1, No. 2, pp. 147–157.

Ronald R. Yager and Vladik Kreinovich, “Decision Making Under Interval Probabilities”, *International Journal of Approximate Reasoning*, 1999, Vol. 22, No. 3, pp. 195–215.

Sanjeev Subbaramu, Ann Q. Gates, and Vladik Kreinovich, “Application of Kolmogorov Complexity to Image Processing: It Is Possible to Have a Better Compression, but It Is Not Possible to Have the Best One”, *Bulletin of the European*

Association for Theoretical Computer Science (EATCS), 1999, Vol. 69, pp. 145–150.

Ronald R. Yager and Vladik Kreinovich, “On How to Merge Sorted Lists Coming from Different Web Search Tools”, *Soft Computing*, 1999, Vol. 3, pp. 83–88.

Olga Kosheleva and Vladik Kreinovich, “Only Intervals Preserve the Invertibility of Arithmetic Operations”, *Reliable Computing*, 1999, Vol. 5, No. 4, pp. 385–394.

Chadi Hamzo and Vladik Kreinovich, “On Average Bit Complexity of Interval Arithmetic”, *Bulletin of the European Association for Theoretical Computer Science (EATCS)*, 1999, Vol. 68, pp. 153–156.

Vladik Kreinovich and Jürgen Wolff von Gudenberg, “Arithmetic of complex sets: Nickel’s classical paper revisited from a geometric viewpoint”, *Geombinatorics*, 1999, Vol. 9, No. 1, pp. 21–26.

Vladik Kreinovich, “Coincidences are Not Accidental: a Theorem”, *Cybernetics and Systems: An International Journal*, 1999, Vol. 30, No. 5, pp. 429–440.

Vladik Kreinovich and Yeung Yam, “Extending T-Norms Beyond [0,1]: Relevant Results of Semigroup Theory”, *BULLETIN for Studies and Exchanges on Fuzziness and its Applications (BUSEFAL)*, No. 78, May 1999, pp. 12–16.

Hung T. Nguyen and Vladik Kreinovich, “How to Divide a Territory? A New Simple Differential Formalism for Optimization of Set Functions”, *International Journal of Intelligent Systems*, 1999, Vol. 14, No. 3, pp. 223–251.

Bernadette Bouchon-Meunier and Vladik Kreinovich, “Fuzzy modus ponens as a calculus of logical modifiers: towards Zadeh’s vision of implication calculus”, *Information Sciences*, 1999, Vol. 116, pp. 219–227.

Scott A. Starks and Vladik Kreinovich, “Locating the whole pattern is better than locating its pieces: a geometric explanation of an empirical phenomenon,” *Geombinatorics*, 1999, Vol. 8, No. 4, pp. 116–121.

Olga Kosheleva and Vladik Kreinovich, “Error estimation for indirect measurements: Interval computation problem is (slightly) harder than a similar probabilistic computational problem”, *Reliable Computing*, 1999, Vol. 5, No. 1, pp. 81–95.

Misha Koshelev, Vladik Kreinovich, and Luc Longpré, “Encryption Algorithms Made (Somewhat) More Natural (a pedagogical remark)”, *Bulletin of the European Association for Theoretical Computer Science (EATCS)*, 1999, Vol. 67, pp. 153–156.

Krassimir T. Atanassov and Vladik Kreinovich, “Intuitionistic fuzzy interpretation of interval data”, *Notes on Intuitionistic Fuzzy Sets (NIFS)*, 1999, Vol. 5, No. 1, pp. 1–8.

Vladik Kreinovich and Luc Longpré, “Why Kolmogorov Complexity in Physical Equations?”, *International Journal of Theoretical Physics*, 1998, Vol. 37, No. 11, pp. 2791–2801.

Misha Koshelev, Vladik Kreinovich, Bhuvan Rachamreddy, Haris Yasemis, and Krassimir T. Atanassov, “Fundamental Justification of Intuitionistic Fuzzy Logic and of Interval-Valued Fuzzy Methods”, *Notes on Intuitionistic Fuzzy Sets (NIFS)*, 1998, Vol. 4, No. 2, pp. 42–46.

Vladik Kreinovich, Hung T. Nguyen, Berlin Wu, and Krassimir T. Atanassov, “Fuzzy Justification of Heuristic Methods in Inverse Problems and in Numerical Computations, with Applications to Detection of Business Cycles From Fuzzy and Intuitionistic Fuzzy Data”, *Notes on Intuitionistic Fuzzy Sets (NIFS)*, 1998, Vol. 4, No. 2, pp. 47–56.

T. E. Kaminsky and Vladik Kreinovich, “Natural requirements for interval roundings lead to a hardware-independent characterization of standard rounding procedures”, *Notes on Intuitionistic Fuzzy Sets (NIFS)*, 1998, Vol. 4, No. 2, pp. 57–64.

Ann Q. Gates, Vladik Kreinovich, and Luc Longpré, “Kolmogorov Complexity Justifies Software Engineering Heuristics”, *Bulletin of the European Association for Theoretical Computer Science (EATCS)*, 1998, Vol. 66, pp. 150–154.

Bernadette Bouchon-Meunier and Vladik Kreinovich, “From Interval Computations to Modal Mathematics: Applications and Computational Complexity”, *ACM SIGSAM Bulletin*, 1998, Vol. 32, No. 2, pp. 7–11.

Eric R. Scerri, Vladik Kreinovich, Piotr Wojciechowski, and Ronald R. Yager, “Ordinal Explanation of the Periodic System of Chemical Elements”, *International Journal of Uncertainty, Fuzziness, and Knowledge-Based Systems (IJUFKS)*, 1998, Vol. 6, No. 4, pp. 387–399.

Andreas Blass, Yuri Gurevich, Vladik Kreinovich, and Luc Longpré, “A Variation on the Zero-One Law”, *Information Processing Letters*, 1998, Vol. 67, pp. 29–30.

Gerhard Heindl, Vladik Kreinovich, and Anatoly V. Lakeyev, “Solving Linear Interval Systems is NP-Hard Even If We Exclude Overflow and Underflow”, *Reliable Computing*, 1998, Vol. 4, No. 4 pp. 383–388.

Brian Cloteaux, Christophe Eick, Bernadette Bouchon-Meunier, and Vladik Kreinovich, “From Ordered Beliefs to Numbers: How to Elicit Numbers Without Asking for Them (Doable but Computationally Difficult)”, *International Journal of Intelligent Systems*, 1998, Vol. 13, No. 9, pp. 801–820.

Hung T. Nguyen, Vladik Kreinovich, and Valery Shekhter, “On the Possibility of Using Complex Values in Fuzzy Logic For Representing Inconsistencies”, *International Journal of Intelligent Systems*, 1998, Vol. 13, No. 8, pp. 683–714.

Olga Kosheleva, Vladik Kreinovich, Andrei M. Finkelstein, and Steven Chan, “On geometry of radio antenna placements”, *Geombinatorics*, 1998, Vol. 8, No. 2, pp. 46–49.

Vladik Kreinovich and Ilya Molchanov, “How to define an average of several sets?”, *Geombinatorics*, Part I, 1998, Vol. 7, No. 4, pp. 123–131; Part II, 1998, Vol. 8, No. 1, pp. 160–165.

- Gilbert Castillo and Vladik Kreinovich, “Was Stonehenge an observatory?”, *Geombinatorics*, 1998, Vol. 7, No. 3, pp. 83–87.
- S. A. Starks, V. Kreinovich, and A. Meystel, “Multi-Resolution Data Processing: It is Necessary, It is Possible, It is Fundamental”, *Heuristics: The Journal of Intelligent Technologies*, 1997/98, Vol. 10, No. 2, pp. 51–58.
- I. Burhan Türksen, Vladik Kreinovich, and Ronald R. Yager, “A new class of fuzzy implications (axioms of fuzzy implication revisited)”, *Fuzzy Sets and Systems*, 1998, Vol. 100, pp. 267–272.
- Götz Alefeld, Vladik Kreinovich, and Günter Mayer, “The Shape of the Solution Set for Systems of Interval Linear Equations with Dependent Coefficients”, *Mathematische Nachrichten*, 1998, Vol. 192, pp. 23–36.
- Hung T. Nguyen, Vladik Kreinovich, and Piotr Wojciechowski, “Strict Archimedean t-Norms and t-Conorms as Universal Approximators”, *International Journal of Approximate Reasoning*, 1998, Vol. 18, Nos. 3–4, pp. 239–249.
- Diane I. Doser, Kevin D. Crain, Mark R. Baker, Vladik Kreinovich, and Matthew C. Gerstenberger “Estimating uncertainties for geophysical tomography”, *Reliable Computing*, 1998, Vol. 4, No. 3, pp. 241–268.
- David Dennis, Vladik Kreinovich, and Siegfried Rump, “Intervals and the Origin of Calculus”, *Reliable Computing*, 1998, Vol. 4, No. 2, pp. 191–197.
- Francisco G. Fernandez and Vladik Kreinovich, “Fuzzy Implication can be Arbitrarily Complicated: A Theorem”, *International Journal of Intelligent Systems*, 1998, Vol. 13, No. 5, pp. 445–451.
- Maria Beltran, Gilbert Castillo, and Vladik Kreinovich, “Algorithms That Still Produce a Solution (Maybe Not Optimal) Even When Interrupted: Shary’s Idea Justified”, *Reliable Computing*, 1998, Vol. 4, No. 1, pp. 39–53.
- Vladik Kreinovich and Luc Longpré, “Human Visual Perception and Kolmogorov Complexity: Revisited”, *Bulletin of the European Association for Theoretical Computer Science (EATCS)*, 1998, Vol. 64, pp. 155–158.
- Roman R. Zapatrin and Vladik Kreinovich, “An operationalistic reformulation of Einstein’s equivalence principle”, *Gravitacija*, 1997, Vol. 3, No. 2, pp. 51–59 (in Russian).
- Vladik Kreinovich and Luc Longpré, “Nonstandard (Non- σ -Additive) Probabilities in Algebraic Quantum Field Theory”, *International Journal of Theoretical Physics*, 1997, Vol. 36, No. 7, pp. 1601–1615.
- Vladik Kreinovich and Piotr Wojciechowski, “Geometric approach to quark confinement”, *Geombinatorics*, 1997, Vol. 7, No. 1, pp. 9–24.
- Andrei Finkelstein, Olga Kosheleva, and Vladik Kreinovich, “Astrogeometry: towards mathematical foundations”, *International Journal of Theoretical Physics*, 1997, Vol. 36, No. 4, pp. 1009–1020.

Andrei Finkelstein, Olga Kosheleva, and Vladik Kreinovich, “Astrogeometry: geometry explains shapes of celestial bodies”, *Geombinatorics*, 1997, Vol. VI, No. 4, pp. 125–139.

Vladik Kreinovich and Luc Longpré, “Pure Quantum States Are Fundamental, Mixtures (Composite States) Are Mathematical Constructions: An Argument Using Algorithmic Information Theory”, *International Journal on Theoretical Physics*, 1997, Vol. 36, No. 1, pp. 167–176.

Gerhard Heindl, Vladik Kreinovich, and Bernadette Bouchon-Meunier, “Geometry of errors revisited: a natural way to vector-valued metric spaces”, *Geombinatorics*, 1997, Vol. 7, No. 2, pp. 47–60.

Vladik Kreinovich, Joseph Pierluissi, and Misha Koshelev, “A new method of measuring strong currents by their magnetic fields”, *Computers & Electrical Engineering*, 1997, Vol. 23, No. 2, pp. 121–128.

Piotr J. Wojciechowski and Vladik Kreinovich, “On the Lattice Extensions of Partial Orders of Rings”, *Communications in Algebra*, 1997, Vol. 25, No. 3, pp. 935–941.

Vladik Kreinovich and Andrew Bernat, “Is solar system stable? A remark”, *Reliable Computing*, 1997, Vol. 3, No. 2, pp. 149–154.

Vladik Kreinovich, Scott A. Starks, and Günter Mayer, “On a Theoretical Justification of The Choice of Epsilon-Inflation in PASCAL-XSC”, *Reliable Computing*, 1997, Vol. 3, No. 4, pp. 437–452.

Věra Kůrková, Paul C. Kainen, and Vladik Kreinovich, “Estimates of the Number of Hidden Units and Variation with Respect to Half-spaces”, *Neural Networks*, 1997, Vol. 10, No. 6, pp. 1061–1068.

Hung T. Nguyen and Vladik Kreinovich, “Using Gelfond-Przymusińska’s Epistemic Specifications to Justify (Some) Heuristic Methods Used in Expert Systems and Intelligent Control”, *Soft Computing*, 1997, Vol. 1, No. 4, pp. 198–209.

Ronald R. Yager and Vladik Kreinovich, “Using robust optimization to play against an imperfect opponent”, *Soft Computing*, 1997, Vol. 1, No. 2, pp. 69–80.

Vladik Kreinovich and Bernadette Bouchon-Meunier, “Granularity via Non-Deterministic Computations: What We Gain and What We Lose”, *International Journal of Intelligent Systems*, 1997, Vol. 12, pp. 469–481.

Bernadette Bouchon-Meunier, Olga Kosheleva, Vladik Kreinovich, and Hung T. Nguyen, “Fuzzy numbers are the only fuzzy sets that keep invertible operations invertible”, *Fuzzy Sets and Systems*, 1997, Vol. 91, No. 2, pp. 155–163.

Hung T. Nguyen, Vladik Kreinovich, and Qiang Zuo, “Interval-valued degrees of belief: applications of interval computations to expert systems and intelligent control”, *International Journal of Uncertainty, Fuzziness, and Knowledge-Based Systems (IJUFKS)*, 1997, Vol. 5, No. 3, pp. 317–358.

Götz Alefeld, Vladik Kreinovich, and Günter Mayer, “The Shape of the Symmetric, Persymmetric, and Skew-Symmetric Solution Set”, *SIAM Journal on Matrix Analysis and Applications (SIMAX)*, 1997, Vol. 18, No. 3, pp. 693–705.

Hung T. Nguyen and Vladik Kreinovich, “Interval-valued fuzzy control in space exploration” *BULLETIN for Studies and Exchanges on Fuzziness and its Applications (BUSEFAL)*, No. 71, July 1997, pp. 55–64.

Raúl Antonio Trejo Ramírez and Vladik Kreinovich, “How to rate numerical packages? Foundations of ratings, and their possible use in numerical mathematics, in education, and in military design”, *ACM SIGNUM Newsletter*, 1997, Vol. 32, No. 1/2, pp. 2–10.

Hung T. Nguyen and Vladik Kreinovich, “Intelligent Control in Space Exploration: Interval Computations are Needed”, *ACM SIGNUM Newsletter*, 1997, Vol. 32, No. 1/2, pp. 17–36.

Hung T. Nguyen and Vladik Kreinovich, “Intelligent control in space exploration: what non-linearity to choose?” *BULLETIN for Studies and Exchanges on Fuzziness and its Applications (BUSEFAL)*, No. 70, April 1997, pp. 61–69.

Vladimir Dimitrov, Misha Koshelev, and Vladik Kreinovich, “Acausal processes and astrophysics: case when uncertainty is non-statistical (fuzzy?)”, *BULLETIN for Studies and Exchanges on Fuzziness and its Applications (BUSEFAL)*, No. 69, January 1997, pp. 183–191.

Hung T. Nguyen, Vladik Kreinovich, Vyacheslav Nesterov, and Mutsumi Nakamura, “On hardware support for interval computations and for soft computing: a theorem”, *IEEE Transactions on Fuzzy Systems*, 1997, Vol. 5, No. 1, pp. 108–127.

Hung T. Nguyen and Vladik Kreinovich, “From Numerical Intervals to Set Intervals (Interval-Related Results Presented at the First International Workshop on Applications and Theory of Random Sets)”, *Reliable Computing*, 1997, Vol. 3, No. 1, pp. 95–102.

Anatoly V. Lakeyev and Vladik Kreinovich, “NP-hard classes of linear algebraic systems with uncertainties”, *Reliable Computing*, 1997, Vol. 3, No. 1, pp. 51–81.

Vladik Kreinovich, “Space-time is ‘square times’ more difficult to approximate than Euclidean space”, *Geoinformatics*, 1996, Vol. 6, No. 1, pp. 19–29.

Vladik Kreinovich and Luc Longpré, “Unreasonable effectiveness of symmetry in physics”, *International Journal of Theoretical Physics*, 1996, Vol. 35, No. 7, pp. 1549–1555.

Vladik Kreinovich, “Causality explains why spatial and temporal translations commute: a remark”, *International Journal of Theoretical Physics*, 1996, Vol. 35, No. 3, pp. 693–695.

Vladik Kreinovich, “Symmetry characterization of Pimenov’s spacetime: a reformulation of causality axioms”, *International Journal of Theoretical Physics*, 1996, Vol. 35, No. 2, pp. 341–346.

Vladik Kreinovich, “With what accuracy can we measure masses if we have an (approximately known) mass standard”, *ACM SIGNUM Newsletter*, 1996, Vol. 31, No. 4, pp. 26–34.

Mohamed A. Khamsi and Vladik Ya. Kreinovich, “Fixed Point Theorems for Dissipative Mappings in Complete Probabilistic Metric Spaces”, *Mathematica Japonica*, 1996, Vol. 44, No. 3, pp. 513–520.

Diane Doser, Mohamed Amine Khamsi, and Vladik Kreinovich, “Earthquakes and geombinatorics”, *Geombinatorics*, 1996, Vol. 6, No. 2, pp. 48–54.

Andrei Finkelstein, Olga Kosheleva, and Vladik Kreinovich, “Astrogeometry, error estimation, and other applications of set-valued analysis”, *ACM SIGNUM Newsletter*, 1996, Vol. 31, No. 4, pp. 3–25.

Vladik Kreinovich and Anatoly V. Lakeyev, “Linear Interval Equations: Computing Enclosures with Bounded Relative Or Absolute Overestimation is NP-Hard”, *Reliable Computing*, 1996, Vol. 2, No. 4, pp. 341–350.

Vladik Kreinovich and Bernadette Bouchon-Meunier, “Granularity via Non-Deterministic Computations”, *Bulletin for Studies and Exchanges on Fuzziness and its Applications (BUSEFAL)*, No. 68, October 1996, pp. 20–24.

Douglas Schirmer and Vladik Kreinovich, “Towards a More Realistic Definition of Feasibility”, *Bulletin of the European Association for Theoretical Computer Science (EATCS)*, 1996, Vol. 60, pp. 151–153.

Hung T. Nguyen, Vladik Kreinovich, and David Sprecher, “Normal forms for fuzzy logic – an application of Kolmogorov’s theorem” *International Journal on Uncertainty, Fuzziness, and Knowledge-Based Systems*, 1996, Vol. 4, No. 4, pp. 331–349.

Misha Koshelev and Vladik Kreinovich, “Why Monotonicity in Interval Computations? A Remark”, *ACM SIGNUM Newsletter*, 1996, Vol. 31, No. 3, pp. 4–8.

G. William Walster and Vladik Kreinovich, “For unknown–but–bounded errors, interval estimates are often better than averaging”, *ACM SIGNUM Newsletter*, 1996, Vol. 31, No. 2, pp. 6–19.

Vladik Kreinovich and Karen Villaverde, “A Quadratic-Time Algorithm For Smoothing Interval Functions”, *Reliable Computing*, 1996, Vol. 2, No. 3, pp. 255–264.

Bernadette Bouchon-Meunier, Vladik Kreinovich, Anatole Lokshin, and Hung T. Nguyen, “On the formulation of optimization under elastic constraints (with control in mind)”, *Fuzzy Sets and Systems*, 1996, Vol. 81, No. 1, pp. 5–29.

Carlos Ferregut, Soheil Nazarian, Krishnamohan Vennalganti, Ching-Chuan Chang, and Vladik Kreinovich, “Fast Error Estimates For Indirect Measurements: Applications To Pavement Engineering”, *Reliable Computing*, 1996, Vol. 2, No. 3, pp. 219–228.

Robert Lea, Vladik Kreinovich, and Raul Trejo, “Optimal interval enclosures for fractionally-linear functions, and their application to intelligent control”, *Reliable Computing*, 1996, Vol. 2, No. 3, pp. 265–286.

Joe Lorkowski and Vladik Kreinovich. “If we measure a number, we get an interval. What if we measure a function or an operator?”, *Reliable Computing*, 1996, Vol. 2, No. 3, pp. 287–298.

Vladik Kreinovich, Hung Nguyen, and Piotr Wojciechowski, “Fuzzy Logic as Applied Linear Logic”, *BULLETIN for Studies and Exchanges on Fuzziness and its Applications (BUSEFAL)*, No. 67, July 1996, p. 4–13.

Vladik Kreinovich, Vyacheslav M. Nesterov, and Nina A. Zheludeva, “Interval Methods That Are Guaranteed to Underestimate (and the resulting new justification of Kaucher arithmetic)”, *Reliable Computing*, 1996, Vol. 2, No. 2, pp. 119–124.

Vladik Kreinovich and Anatoly V. Lakeyev, “‘Interval Rational = Algebraic’ Revisited: A More Computer Realistic Result”, *ACM SIGNUM Newsletter*, 1996, Vol. 31, No. 1, pp. 14–17.

Olga Kosheleva and Vladik Kreinovich, “How to measure arbitrary distances using a given standard length (i.e., a stick with two marks on it): it is necessary, it is theoretically possible, it is feasible”, *Geombinatorics*, 1996, Vol. 5, No. 4, pp. 142–155.

Vladik Kreinovich, “Maximum entropy and interval computations”, *Reliable Computing*, 1996, Vol. 2, No. 1, pp. 63–79.

Driss Misane and Vladik Kreinovich, “The necessity to check consistency explains the use of parallelepipeds in describing uncertainty”, *Geombinatorics*, 1996, Vol. 5, No. 3, pp. 109–120.

Vladik Kreinovich, Anatoly V. Lakeyev, Sergei I. Noskov, “Approximate linear algebra is intractable”. *Linear Algebra and its Applications*, 1996, Vol. 232, No. 1, pp. 45–54.

Hung T. Nguyen, Olga M. Kosheleva, and Vladik Kreinovich, “Is the success of fuzzy logic really paradoxical? Or: Towards the actual logic behind expert systems”, *International Journal of Intelligent Systems*, 1996, Vol. 11, No. 5, pp. 295–326.

Hung T. Nguyen, Vladik Kreinovich, and Ongard Sirisaengtaksin, “Fuzzy control as a universal control tool”, *Fuzzy Sets and Systems*, 1996, Vol. 80, No. 1, pp. 71–86.

Vladik Kreinovich, “If a polynomial identity guarantees that every partial order on a ring can be extended, then this identity is true only for a zero-ring”, *Algebra Universalis*, 1995, Vol. 33, No. 2, pp. 237–242.

Vladik Kreinovich. “Strongly transitive fuzzy relations: a more adequate way to describe similarity”, *International Journal of Intelligent Systems*, 1995, Vol. 10, No. 12, pp. 1061–1076.

Hung T. Nguyen and Vladik Kreinovich, “Towards theoretical foundations of soft computing applications”, *International Journal on Uncertainty, Fuzziness, and Knowledge-Based Systems*, 1995, Vol. 3, No. 3, pp. 341–373.

Vladik Kreinovich, “Interval rational = algebraic”, *ACM SIGNUM Newsletter*, 1995, Vol. 30, No. 4, pp. 2–13.

Vladik Kreinovich and Günther Mayer, “Towards the future of interval computations (editors’ introduction to the student issue)”, *Reliable Computing*, 1995, Vol. 1, No. 3, pp. 209–214.

Driss Misane and Vladik Kreinovich, “A new characterization of the set of all intervals, based on the necessity to check consistency easily”, *Reliable Computing*, 1995, Vol. 1, No. 3, pp. 285–298.

Bo H. Friesen, Vladik Kreinovich, “Ockham’s razor in interval identification”, *Reliable Computing*, 1995, Vol. 1, No. 3, pp. 225–238.

Hung T. Nguyen, Vladik Kreinovich, Bob Lea, and Dana Tolbert. “Interpolation that leads to the narrowest intervals, and its application to expert systems and intelligent control”, *Reliable Computing*, 1995, Vol. 1 No. 3, pp. 299–316.

Bo Friesen and Vladik Kreinovich. “How to improve Mamdani’s approach to fuzzy control”, *International Journal of Intelligent Systems*, 1995, Vol. 10, No. 11, pp. 947–957.

David Nemir, Vladik Kreinovich, and Efren Gutierrez, “Applications of interval computations to earthquake-resistant engineering: how to compute derivatives of interval functions fast”. *Reliable Computing*, 1995, Vol. 1, No. 2, pp. 141–172.

Bonnie Traylor, Vladik Kreinovich, “A bright side of NP-hardness of interval computations: interval heuristics applied to NP-problems”, *Reliable Computing*, 1995, Vol. 1, No. 3, pp. 343–360.

Vladik Kreinovich. “Why intervals? A simple limit theorem that is similar to limit theorems from statistics,” *Reliable Computing*, 1995, Vol. 1, No. 1, pp. 33–40.

Dara Morgenstein and Vladik Kreinovich, “Which algorithms are feasible and which are not depends on the geometry of space-time”, *Geombinatorics*, 1995, Vol. 4, No. 3, pp. 80–97.

Jiri Rohn and Vladik Kreinovich, “Computing exact componentwise bounds on solutions of linear systems with interval data is NP-hard”. *SIAM Journal on Matrix Analysis and Applications (SIMAX)*, 1995, Vol. 16, No. 2, pp. 415–420.

Olga Kosheleva and Vladik Kreinovich, “Unit-distance preserving theorem is logically non-trivial”, *Geombinatorics*, 1995, Vol. 4, No. 4, pp. 119–128.

Vladik Kreinovich. “Approximately measured causality implies the Lorentz group: Alexandrov-Zeeman result made more realistic”. *International Journal of Theoretical Physics*, 1994, Vol. 33, No. 8, pp. 1733–1747.

Olga Kosheleva, Vladik Kreinovich, and Ricardo Labiaga. “Inter-stellar travel and simple geometrical combinatorics: how many trajectory corrections are necessary?” *Geombinatorics*, 1994, Vol. 4, No. 4, pp. 129–136.

Daniel E. Cooke, Richard Duran, Ann Gates, and Vladik Kreinovich, “Geombinatoric problems of environmentally safe manufacturing and linear logic”, *Geombinatorics*, 1994, Vol. 4, No. 2, pp. 36–47.

Vladik Kreinovich. “How to represent measurement errors? geombinatoric approach”, *Geombinatorics*, 1994, Vol. 4, No. 1, pp. 17–22.

Vladik Kreinovich, Richard Watson, “How difficult is it to invent a non-trivial game?”, *Cybernetics and Systems*, 1994, Vol. 25, No. 4, pp. 629–640.

Vladik Kreinovich and Olga Kosheleva, “An application of logic to combinatorial geometry: how many tetrahedra are equidecomposable with a cube?”. *Mathematical Logic Quarterly*, 1994, Vol. 40, No. 1, pp. 31–34.

Hung T. Nguyen, Vladik Kreinovich, and Dana Tolbert, “A measure of average sensitivity for fuzzy logics”, *International Journal on Uncertainty, Fuzziness, and Knowledge-Based Systems*, 1994, Vol. 2, No. 4, pp. 361–375.

Arthur Ramer and Vladik Kreinovich. “Maximum entropy approach to fuzzy control”, *Information Sciences*, 1994, Vol. 81, No. 3–4, pp. 235–260.

Paul C. Kainen, Věra Kůrková, Vladik Kreinovich, and Ongard Sirisaengtaksin. “Uniqueness of network parameterization and faster learning”, *Neural, Parallel, and Scientific Computations*, 1994, Vol. 2, p. 459–466.

Vladik Kreinovich and Andrew Bernat, “Parallel algorithms for interval computations: an introduction”, *Interval Computations*, 1994, No. 3, pp. 6–62.

Vladik Kreinovich, Thomas Swenson, Alex Elentukh, “Interval approach to testing software”, *Interval Computations*, 1994, No. 2, pp. 90–109.

Vladik Kreinovich. “Error estimation for indirect measurements is exponentially hard,” *Neural, Parallel, and Scientific Computations*, 1994, Vol. 2, No. 2, pp. 225–234.

Olga Kosheleva, Vladik Kreinovich. “Geombinatorics, computational complexity, and saving environment: let’s start”, *Geombinatorics*, 1994, Vol. 3, No. 3 (January), pp. 90–99.

Vladik Kreinovich. “Is $3K$ radiation of cosmological origin or it is a mixture of radiations of small sources?”. *Comments on Astrophysics*, 1993, Vol. 16, No. 5, pp. 279–286.

Vladik Kreinovich, Gennadii N. Solopchenko, “Canonical-parameter estimation for instrument complex frequency response”, *Izmeritel’naya Tekhnika*, 1993, No. 9, pp. 11–14 (in Russian); English translation: *Measurement Techniques*, 1993, Vol. 36, No. 9, pp. 968–972.

Olga Kosheleva, Vladik Kreinovich, and Andrei Gerasimov. “Geometry of emotions revisited: why do emotions form a circle?”, *Cybernetics and Systems*, 1993, Vol. 24, No. 6, pp. 547–565.

V. Ya. Kreinovich and G. N. Solopchenko, “Canonical-parameter estimation for instrument complex frequency response”, *Izmeritel'naya Tekhnika*, 1993, No. 9, pp. 11–14 (in Russian), English translation: *Measurement Techniques*, 1993, Vol. 36, No. 9, pp. 968–972.

Mutsumi Nakamura, Ray Mines, and Vladik Kreinovich. “Guaranteed intervals for Kolmogorov’s theorem (and their possible relation to neural networks)”, *Interval Computations*, 1993, No. 3, pp. 183–199.

Ongard Sirisaengtaksin and Vladik Kreinovich. “Neural networks that are not sensitive to the imprecision of hardware neurons”, *Interval Computations*, 1993, No. 4, p. 100–113.

Karen Villaverde and Vladik Kreinovich. “A linear-time algorithm that locates local extrema of a function of one variable from interval measurement results,” *Interval Computations*, 1993, No. 4, pp. 176–194.

Elsa Villa, Andrew Bernat, and Vladik Kreinovich “Estimating errors of indirect measurement on realistic parallel machines: routings on 2-D and 3-D meshes that are nearly optimal”, *Interval Computations*, 1993, No. 4, pp. 154–175.

Vladik Kreinovich, A. V. Lakeyev, and S. I. Noskov. “Optimal solution of interval linear systems is intractable (NP-hard).” *Interval Computations*, 1993, No. 1, pp. 6–14.

Vladik Kreinovich. “Carnap’s induction and machine learning: a remark”. *Cybernetics and Systems*, 1993, Vol. 24, No. 6, p. 567–571.

Vladik Kreinovich, Ongard Sirisaengtaksin, “3-layer neural networks are universal approximators for functionals and for control strategies”, *Neural, Parallel, and Scientific Computations*, 1993, Vol. 1, pp. 325–346.

Marion L. Ellzey, Jr., Vladik Kreinovich, Julio Peña. “Fast rotation of a 3D image around an arbitrary line”, *Computers & Graphics*, 1993, Vol. 17, No. 2, pp. 121–126.

Vladik Kreinovich, Chris Quintana, Olac Fuentes. “Genetic algorithms: what fitness scaling is optimal?” *Cybernetics and Systems: an International Journal*, 1993, Vol. 24, No. 1, pp. 9–26.

Vladik Kreinovich. “Only particles with spin ≤ 2 are mediators for fundamental forces: why?” *Physics Essays*, December 1992, Vol. 5, No. 4, pp. 458–462.

Vladik Kreinovich, Andrew Bernat, Olga Kosheleva, and Andrei Finkelstein. “Interval estimates for closure phase and closure amplitude imaging in radio astronomy”, *Interval Computations*, 1992, No. 2(4), pp. 51–71.

Vladik Kreinovich and Chris Quintana. "How does new evidence change our estimates of probabilities: Carnap's formula revisited", *Cybernetics and Systems: an International Journal*, 1992, Vol. 23, No. 2, pp. 143–168.

Olga M. Kosheleva and Vladik Kreinovich. "Algorithmic problems of nontransitive (SSB) utilities," *Mathematical Social Sciences*, 1991, Vol. 21, pp. 95–100.

Vladik Kreinovich, Andrew Bernat, Elsa Villa and Yvonne Mariscal. "Parallel computers estimate errors caused by imprecise data," *Interval Computations*, 1991, No. 2, pp. 31–46.

Vladik Kreinovich. "Spacetime isomorphism problem is intractable (NP-hard)," *International Journal of Theoretical Physics*, 1991, Vol. 30, No. 9, pp. 1249–1257.

Vladik Kreinovich, Alejandro Vazquez and Olga M. Kosheleva. "Prediction problem in quantum mechanics is intractable (NP-hard)," *International Journal of Theoretical Physics*, 1991, Vol. 30, No. 2, pp. 113–122.

Vladik Kreinovich and Sundeep Kumar. "How to help intelligent systems with different uncertainty representations communicate with each other," *Cybernetics and Systems: International Journal*, 1991, Vol. 22, No. 2, pp. 217–222.

Vladik Kreinovich. "Arbitrary nonlinearity is sufficient to represent all functions by neural networks: a theorem," *Neural Networks*, 1991, Vol. 4, 381–383.

Evgeny Ya. Dantsin and Vladik Kreinovich. "Probabilistic inference in prediction systems," *Academy of Sciences Doklady*, 1989, Vol. 307, No. 1, pp. 17–21 (in Russian); English translation: *Soviet Mathematics Doklady*, 1990, Vol. 40, No. 1, pp. 8–12.

Anna A. Vakulenko and Vladik Kreinovich. "Physico-geometrical investigation of brittle fracture during creep," *Prikladnaya Matematika i Mekhanika*, 1989, Vol. 53, No. 5, pp. 837–844 (in Russian); English translation: *Journal of Applied Mathematics and Mechanics*, 1989, Vol. 53, No. 5, pp. 660–665.

Inna S. Kirillova, Vladik Kreinovich, and Gennady N. Solopchenko. "Distribution-independent estimators of error characteristics of measuring instruments," *Izmeritel'naya Tekhnika*, 1989, No.7, pp.5-8 (in Russian), English translation: *Measurement Techniques*, 1989, Vol. 32, No. 7, pp. 621–627.

Vitaly Kozlenko and Vladik Kreinovich. "Using computers for solving optimal control problems in case of uncertain criteria," *International Radioelectronics Surveys*, 1989, No. 8, pp. 60–66 (in Russian).

Andrei M. Finkelstein and Vladik Kreinovich. "The singularities in quantum cosmology," *Astrophysics and Space Science*, 1987, Vol. 137, No. 1, pp. 73–76.

Anna A. Vakulenko and Vladik Kreinovich. "A geometrical model of brittle fracture under creep," *Prikladnaya Matematika i Mekhanika*, 1987, Vol. 51, No. 2, pp. 341–345 (in Russian); English translation: *Journal of Applied Mathematics and Mechanics*, 1987, Vol. 51, No. 2, pp. 265–268.

Yuri V. Lagovier, Vladik Kreinovich, and N. B. Rashkovskaya. "Mathematical model of fragmentation kinetics upon granulation of finely dispersed materials by the mixing method in a high-speed horizontal rotor continuous-action apparatus," *Zhurnal Prikladnoi Khimii*, 1987, Vol. 60, No. 8, pp. 1781–1788 (in Russian); English translation: *Journal of Applied Chemistry*, 1987, Vol. 60, No. 8, pt. 1, pp. 1661–1667.

Igor N. Krotkov, Vladik Kreinovich and Valery D. Mazin. "General form of measurement transformations which admit the computational methods of metrological analysis of measuring- testing and measuring-computing systems," *Izmeritel'naya Tekhnika*, 1987, No. 10, pp. 8–10 (in Russian); English translation: *Measurement Techniques*, 1987, Vol. 30, No. 10, pp. 936–939.

Vladimir G. Dmitriev, Nina A. Zheludeva, and Vladik Kreinovich. "Applications of interval analysis methods to estimate algorithms errors in measuring systems," *Measurement, Control, Automatization*, 1985, No. 1 (53), pp. 31–40 (in Russian).

Vladik Kreinovich and Marina I. Pavlovich. "Error estimate of the result of indirect measurements by using a calculational experiment," *Izmeritel'naya Tekhnika*, 1985, No. 3, pp. 11–13 (in Russian), English translation: *Measurement Techniques*, 1985, Vol. 28, No. 3, pp. 201–205.

S. N. Pandey, Andrei M. Finkelstein, and Vladik Kreinovich. "Birkhoff theorem in a metric theory of gravitation," *Progress in Theoretical Physics*, 1983, Vol. 70, No. 3, pp. 883–885.

Andrei M. Finkelstein, Vladik Kreinovich and S. N. Pandey. "Relativistic reductions for radiointerferometric observables," *Astrophysics and Space Science*, 1983, Vol. 94, pp. 233–247.

Andrei M. Finkelstein, Olga M. Kosheleva and Vladik Kreinovich. "On the uniqueness of image reconstruction from the amplitude of radiointerferometric responses," *Astrophysics and Space Science*, 1983, Vol. 92, No. 1, pp. 31–36.

Vladik Kreinovich and Urs Oswald. "A decision method for the universal theorems of Quine's New Foundations," *Zeitschrift fur Mathematische Logik und Grundlagen der Mathematik*, 1982, Bd. 28, S. 181–187.

Piet G. Vroegindeweyj, Vladik Kreinovich, and Olga Kosheleva. "From a connected, partially ordered set of events to a field of time intervals," *Foundations of Physics*, 1980, Vol. 10, No. 5/6, pp. 469–484.

Olga M. Kosheleva and Vladik Kreinovich. "A letter on maximum entropy method," *Nature*, 1979, Vol. 281, No. 5733 (Oct. 25), pp. 708–709.

Alexander F. Dravskikh, Olga M. Kosheleva, Vladik Kreinovich, and Andrei M. Finkelstein. "Optimization of the procedure for measuring arcs by radiointerferometry," *Pisma v Astronomicheskoy Zhurnal*, 1979, Vol. 5, No. 8, pp. 422–425 (in Russian); English translation: *Soviet Astronomy Letters*, 1979, Vol. 5, No. 4, pp. 227–228.

Alexander F. Dravskikh, Olga M. Kosheleva, Vladik Kreinovich, and Andrei M. Finkelstein. “The method of arcs and differential astrometry,” *Pisma v Astronomicheskoy Zhurnal*, 1979, Vol. 5, No. 6, pp. 300–303 (in Russian); English translation: *Soviet Astronomy Letters*, 1979, Vol. 5, No. 3, pp. 160–162.

Piet G. Vroegindeweij, Vladik Kreinovich, and Olga Kosheleva. “An extension of a theorem of A. D. Alexandrov to a class of partially ordered fields,” *Proceedings of the Royal Academy of Science of Netherlands*, 1979, Vol. 82(3), Series A, September 21, pp. 363–376.

Vladik Kreinovich, Robert Sine. “Remarks on billiards,” *American Mathematical Monthly*, 1979, Vol. 86, No.3, pp. 204–206.

K. S. Bharna, Andrei M. Finkelstein, Lev E. Gurevich and Vladik Kreinovich. “The naked singularity in the scalar-tensor gravitation theory,” *Astrophysics and Space Science*, 1978, Vol. 57, No. 2, pp. 371–380.

Vladik Kreinovich. “What does the law of the excluded middle follow from?,” *Proceedings of the Leningrad Mathematical Institute of the Academy of Sciences*, 1974, Vol. 40, pp.37-40 (in Russian), English translation: *Journal of Soviet Mathematics*, 1977, Vol. 8, No. 1, pp. 266–271.

Vladik Kreinovich, “Constructivization of the notions of epsilon- entropy and epsilon-capacity,” *Proceedings of the Leningrad Mathematical Institute of the Academy of Sciences*, 1974, Vol. 40, pp. 38–44 (in Russian), English translation: *Journal of Soviet Mathematics*, 1977, Vol. 8, No. 3, pp. 271–276.

Vladik Kreinovich. “Derivation of the Schroedinger equations from scale invariance,” *Teoreticheskaya i Matematicheskaya Fizika*, 1976, Vol. 26, No. 3, pp. 414–418 (in Russian); English translation: *Theoretical and Mathematical Physics*, 1976, Vol. 8, No. 3, pp. 282–285.

Vladik Kreinovich. “On the problem of recovering the ψ -function in non-relativistic quantum mechanics,” *Teoreticheskaya i Matematicheskaya Fizika*, 1976, Vol. 28, No. 1, pp. 56–64 (in Russian); English translation: *Theoretical and Mathematical Physics*, 1976, Vol. 8, No. 7, pp. 56–64.

Andrei M. Finkelstein and Vladik Kreinovich. “Relativistic theory of moon motion,” *Celestial Mechanics*, 1976, Vol. 13, No. 2, pp. 151–176.

Vladik Kreinovich. “Gupta’s derivation of Einstein equations,” *Soviet Academy of Sciences Doklady*, 1975, Vol. 222, No. 2, pp. 319–321 (in Russian); translated into English as *Soviet Physics Doklady*, 1975, Vol. 20, No. 5, pp. 341–342.

Vladik Kreinovich. “Influence of the possible violations of Equivalence Principle on Moon motion”, *Leningrad University Vestnik*, 1975, No. 19, pp. 144–148 (in Russian).

Vladik Kreinovich. “On A. F. Timan’s inverse problem, for ϵ -entropy of compacts,” *Soviet Mathematics Uspekhi*, 1975, Vol. 30, No. 1, pp. 241–242 (in Russian).

Vladik Kreinovich. “On the metrization problem for spaces of kinematic type”, *Soviet Academy of Sciences Doklady*, 1974, Vol. 218, No. 6, pp. 1272–1275 (in Russian); translated into English as *Soviet Mathematics Doklady*, 1974, Vol. 15, pp. 1486–1490.

Research Conference Papers

Andrzej Pownuk and Vladik Kreinovich, “Why Unexpectedly Positive Experiences Make Decision Makers More Optimistic: An Explanation”, *Proceedings of the 10th International Workshop on Constraint Programming and Decision Making CoProd’2017*, El Paso, Texas, November 3, 2017, to appear.

Andrzej Pownuk and Vladik Kreinovich, “Which Value \tilde{x} Best Represents a Sample x_1, \dots, x_n : Utility-Based Approach Under Interval Uncertainty”, *Proceedings of the 10th International Workshop on Constraint Programming and Decision Making CoProd’2017*, El Paso, Texas, November 3, 2017, to appear.

Angel F. Garcia Contreras, Martine Ceberio, and Vladik Kreinovich, “Plans Are Worthless but Planning Is Everything: A Theoretical Explanation of Eisenhower’s Observation”, *Proceedings of the 10th International Workshop on Constraint Programming and Decision Making CoProd’2017*, El Paso, Texas, November 3, 2017, to appear.

Mahdokht Afravi and Vladik Kreinovich, “Fuzzy Systems Are Universal Approximators for Random Dependencies: A Simplified Proof”, *Proceedings of the 10th International Workshop on Constraint Programming and Decision Making CoProd’2017*, El Paso, Texas, November 3, 2017, to appear.

Angel F. Garcia Contreras, Martine Ceberio, and Vladik Kreinovich, “Why Convex Optimization Is Ubiquitous and Why Pessimism Is Widely Spread”, *Proceedings of the 10th International Workshop on Constraint Programming and Decision Making CoProd’2017*, El Paso, Texas, November 3, 2017, to appear.

Olga Kosheleva, Martine Ceberio, and Vladik Kreinovich, “Attraction-Repulsion Forces Between Biological Cells: A Theoretical Explanation of Empirical Formulas”, *Proceedings of the 10th International Workshop on Constraint Programming and Decision Making CoProd’2017*, El Paso, Texas, November 3, 2017, to appear.

Christian Servin, Gerardo Muela and Vladik Kreinovich, “Can We Detect Crisp Sets Based Only on the Subsethood Ordering of Fuzzy Sets? Fuzzy Sets And/Or Crisp Sets Based on Subsethood of Interval-Valued Fuzzy Sets?”, *Proceedings of the 2017 Annual Conference of the North American Fuzzy Information Processing Society NAFIPS’2017*, Cancun, Mexico, October 16–18, 2017, to appear.

Hamza Alkhatib, Boris Kargoll, Ingo Neumann, and Vladik Kreinovich, “Normalization-Invariant Fuzzy Logic Operations Explain Empirical Success of Student Distributions in Describing Measurement Uncertainty”, *Proceedings of the 2017 Annual Conference of the North American Fuzzy Information Processing Society NAFIPS’2017*, Cancun, Mexico, October 16–18, 2017, to appear.

Patricia Melin, Oscar Castillo, Andrzej Pownuk, Olga Kosheleva, and Vladik Kreinovich, “How to Gauge the Accuracy of Fuzzy Control Recommendations: A Simple Idea”, *Proceedings of the 2017 Annual Conference of the North American Fuzzy Information Processing Society NAFIPS’2017*, Cancun, Mexico, October 16–18, 2017, to appear.

Ligang Sun, Hani Dbouk, Ingo Neumann, Steffen Schoen, and Vladik Kreinovich, “Taking Into Account Interval (and Fuzzy) Uncertainty Can Lead to More Adequate Statistical Estimates”, *Proceedings of the 2017 Annual Conference of the North American Fuzzy Information Processing Society NAFIPS’2017*, Cancun, Mexico, October 16–18, 2017, to appear.

Sergey Kumkov, Vladik Kreinovich, and Andrzej Pownuk, “In System Identification, Interval (and Fuzzy) Estimates Can Lead to Much Better Accuracy than the Traditional Statistical Ones: General Algorithm and Case Study”, *Proceedings of the IEEE Conference on Systems, Man, and Cybernetics SMC’2017*, Banff, Canada, October 5–8, 2017, to appear.

Justin Parra, Olac Fuentes, Elizabeth Anthony, and Vladik Kreinovich, “Prediction of Volcanic Eruptions: Case Study of Rare Events in Chaotic Systems with Delay”, *Proceedings of the IEEE Conference on Systems, Man, and Cybernetics SMC’2017*, Banff, Canada, October 5–8, 2017, to appear.

Solymar Ayala Cortez, Aaron A. Velasco, and Vladik Kreinovich, “Soft Computing Approach to Detecting Discontinuities: Seismic Analysis and Beyond”, *Proceedings of the IEEE Conference on Systems, Man, and Cybernetics SMC’2017*, Banff, Canada, October 5–8, 2017, to appear.

Ludmila Dymova, Pavel Sevastjanov, Andrzej Pownuk, and Vladik Kreinovich, “Practical Need for Algebraic (Equality-Type) Solutions of Interval Equations and for Extended-Zero Solutions”, *Proceedings of the 12th International Conference on Parallel Processing and Applied Mathematics PPAM’17*, Lublin, Poland, September 10–13, 2017, to appear.

Bartłomiej Jacek Kubica, Andrzej Pownuk, and Vladik Kreinovich, “What Decision to Make In a Conflict Situation under Interval Uncertainty: Efficient Algorithms for the Hurwicz Approach”, *Proceedings of the 12th International Conference on Parallel Processing and Applied Mathematics PPAM’17*, Lublin, Poland, September 10–13, 2017, to appear.

Gerardo Muela, Olga Kosheleva, Vladik Kreinovich, and Christian Servin, “It Is Possible to Determine Exact Fuzzy Values Based on an Ordering of Interval-Valued or Set-Valued Fuzzy Degrees”, *Proceedings of IEEE International Conference on Fuzzy Systems FUZZ-IEEE’2017*, Naples, Italy, July 9–12, 2017.

Gerardo Muela, Vladik Kreinovich, and Christian Servin, “Scaling-Invariant Description of Dependence Between Fuzzy Variables: Towards a Fuzzy Version of Copulas”, *Proceedings of the Joint 17th Congress of International Fuzzy Systems Association and 9th International Conference on Soft Computing and Intelligent Systems IFSA-SCIS’2017*, Otsu, Japan, June 27–30, 2017.

Hung T. Nguyen, Kittawit Autcharoyapanitkul, and Vladik Kreinovich, “Fuzzy Techniques Explain Empirical Power Law Governing Wars and Terrorist Attacks”, *Proceedings of the Joint 17th Congress of International Fuzzy Systems Association and 9th International Conference on Soft Computing and Intelligent Systems IFSA-SCIS’2017*, Otsu, Japan, June 27–30, 2017.

Hung T. Nguyen, Kittawit Autchariyapanitkul, Olga Kosheleva, and Vladik Kreinovich, “Uncertain Information Fusion and Knowledge Integration: How to Take Reliability into Account”, *Proceedings of the Joint 17th Congress of International Fuzzy Systems Association and 9th International Conference on Soft Computing and Intelligent Systems IFSA-SCIS’2017*, Otsu, Japan, June 27–30, 2017.

Francisco Zapata, Olga Kosheleva, and Vladik Kreinovich, “Which Material Design Is Possible Under Additive Manufacturing: A Fuzzy Approach”, *Proceedings of the Joint 17th Congress of International Fuzzy Systems Association and 9th International Conference on Soft Computing and Intelligent Systems IFSA-SCIS’2017*, Otsu, Japan, June 27–30, 2017.

Mahdokht Michelle Afravi and Vladik Kreinovich, “From Fuzzy Universal Approximation to Fuzzy Universal Representation: It All Depends on the Continuum Hypothesis”, *Proceedings of the Joint 17th Congress of International Fuzzy Systems Association and 9th International Conference on Soft Computing and Intelligent Systems IFSA-SCIS’2017*, Otsu, Japan, June 27–30, 2017.

Kittawit Autchariyapanitkul, Hung T. Nguyen, and Vladik Kreinovich, “Fuzzy Sets As Strongly Consistent Random Sets”, *Proceedings of the Joint 17th Congress of International Fuzzy Systems Association and 9th International Conference on Soft Computing and Intelligent Systems IFSA-SCIS’2017*, Otsu, Japan, June 27–30, 2017.

Andrzej Pownuk and Vladik Kreinovich, “Isn’t Every Sufficiently Complex Logic Multi-Valued Already: Lindenbaum-Tarski Algebra and Fuzzy logic Are Both Particular Cases of the Same Idea”, *Proceedings of the Joint 17th Congress of International Fuzzy Systems Association and 9th International Conference on Soft Computing and Intelligent Systems IFSA-SCIS’2017*, Otsu, Japan, June 27–30, 2017.

Vladik Kreinovich, “How to deal with uncertainties in computing: from probabilistic and interval uncertainty to combination of different approaches, with applications to engineering and bioinformatics”, In: Jolanta Mizera-Pietraszko, Ricardo Rodriguez Jorge, Diego Moisés Almazo Pérez, and Pit Pichappan (eds.), *Advances in Digital technologies. Proceedings of the Eighth International Conference on the Applications of Digital Information and Web Technologies ICADIWT’2017*, Ciudad Juarez, Chihuahua, Mexico, March 29–31, 2017, IOS Press, Amsterdam, 2017, pp. 3–15.

Anthony Welte, Luc Jaulin, Martine Ceberio, and Vladik Kreinovich, “Robust Data Processing in the Presence of Uncertainty and Outliers: Case of Localization Problems”, *Proceedings of the IEEE Series of Symposia in Computational Intelligence SSCI’2016*, Athens, Greece, December 6–9, 2016.

Ildar Batyrshin, Thongchai Dumrongpokaphan, Vladik Kreinovich, and Olga Kosheleva, “How to Select an Appropriate Similarity Measure: Towards a Symmetry-Based Approach”, *Proceedings of the 5th International Symposium on Integrated Uncertainty in Knowledge Modelling and Decision Making IUKM’2016*, Da Nang, Vietnam, November 30 – December 2, 2016, pp. 457–468.

Songsak Sriboonchitta, Vladik Kreinovich, Olga Kosheleva, and Hung T. Nguyen, “Need for Most Accurate Discrete Approximations Explains Effectiveness of Statistical Methods Based on Heavy-Tailed Distributions”, *Proceedings of the 5th International Symposium on Integrated Uncertainty in Knowledge Modelling and Decision Making IUKM’2016*, Da Nang, Vietnam, November 30 – December 2, 2016, pp. 523–531.

Pedro Barragan Olague and Vladik Kreinovich, “Why Half-Frequency in Intelligent Compaction”, *Proceedings of the 4th International Conference on Mathematical and Computer Modeling*, Omsk, Russia, November 11, 2016, pp. 23–26.

Olga Kosheleva, Mahdokht Afravi, and Vladik Kreinovich, “Why Utility Non-Linearly Depends on Money: A Commonsense Explanation”, *Proceedings of the 4th International Conference on Mathematical and Computer Modeling*, Omsk, Russia, November 11, 2016, pp. 13–18.

Olga Kosheleva and Vladik Kreinovich, “Cosmological Inflation: A Simple Qualitative Explanation”, *Proceedings of the 4th International Conference on Mathematical and Computer Modeling*, Omsk, Russia, November 11, 2016, pp. 19–23.

Olga Kosheleva, Martha Osegueda Escobar, and Vladik Kreinovich, “Von Neumann-Morgenstern Solutions, Quantum Physics, and Stored Programs vs. Data: Unity of Von Neumann’s Legacy”, *Proceedings of the 4th International Conference on Mathematical and Computer Modeling*, Omsk, Russia, November 11, 2016, pp. 8–13.

Fernando Cervantes, Bryan Usevitch, and Vladik Kreinovich, “Why L^p -methods in Signal and Image Processing: A Fuzzy-Based Explanation”, *Proceedings of the 2016 Annual Conference of the North American Fuzzy Information Processing Society NAFIPS’2016*, El Paso, Texas, October 31 – November 4, 2016.

Olga Kosheleva, Vladik Kreinovich, Martha Osegueda Escobar, and Kimberly Kato, “Towards the Most Robust Way of Assigning Numerical Degrees to Ordered Labels, With Possible Applications to Dark Matter and Dark Energy”, *Proceedings of the 2016 Annual Conference of the North American Fuzzy Information Processing Society NAFIPS’2016*, El Paso, Texas, October 31 – November 4, 2016.

Mahdokht Afravi and Vladik Kreinovich, “What If We Use Different “And”-Operations in the Same Expert System”, *Proceedings of the 2016 Annual Conference of the North American Fuzzy Information Processing Society NAFIPS’2016*, El Paso, Texas, October 31 – November 4, 2016.

Andrzej Pownuk and Vladik Kreinovich, “Which Point From an Interval Should We Choose?”, *Proceedings of the 2016 Annual Conference of the North American*

Fuzzy Information Processing Society NAFIPS'2016, El Paso, Texas, October 31 – November 4, 2016.

Pedro Barragan Olague, Olga Kosheleva, and Vladik Kreinovich, “How Resilient Modulus of a Pavement Depends on Moisture Level: Towards a Theoretical Justification of a Practically Important Empirical Formula”, *Proceedings of the 2016 Annual Conference of the North American Fuzzy Information Processing Society NAFIPS'2016*, El Paso, Texas, October 31 – November 4, 2016.

Mahdokht Afravi, Vladik Kreinovich, and Thongchai Dumrongpokaphan, “Metric Spaces Under Interval Uncertainty: Towards an Adequate Definition”, *Proceedings of the 15th Mexican International Conference on Artificial Intelligence MICAI'2016*, Cancun, Mexico, October 25–29, 2016, Springer Lecture Notes in Artificial Intelligence.

Vladik Kreinovich and Songsak Sriboonchitta, “For Multi-Interval-Valued Fuzzy Sets, Centroid Defuzzification Is Equivalent to Defuzzifying Its Interval Hull: A Theorem”, *Proceedings of the 15th Mexican International Conference on Artificial Intelligence MICAI'2016*, Cancun, Mexico, October 25–29, 2016, Springer Lecture Notes in Artificial Intelligence.

Olga Kosheleva, Vladik Kreinovich, Joe Lorkowski, and Martha Osegueda, “How to Transform Partial Order Between Degrees into Numerical Values”, *Proceedings of International IEEE Conference on Systems, Man, and Cybernetics SMC'2016*, Budapest, Hungary, October 9–12, 2016.

Fernando Cervantes, Bryan Usevitch, and Vladik Kreinovich, “Rotation-Invariance Can Further Improve State-of-the-Art Blind Deconvolution Techniques”, *Proceedings of International IEEE Conference on Systems, Man, and Cybernetics SMC'2016*, Budapest, Hungary, October 9–12, 2016.

Olga Kosheleva, Vladik Kreinovich, and Martha Osegueda Escobar, “Fuzzy-Inspired Hierarchical Version of the von Neumann-Morgenstern Solutions as a Natural Way to Resolve Collaboration-Related Conflicts”, *Proceedings of International IEEE Conference on Systems, Man, and Cybernetics SMC'2016*, Budapest, Hungary, October 9–12, 2016.

Bui Cong Cuong, Vladik Kreinovich, and Roan Thi Ngan, “A classification of representable t-norm operators for picture fuzzy sets”, *Proceedings of the Eighth International Conference on Knowledge and Systems Engineering KSE'2016*, Hanoi, Vietnam, October 6–8, 2016.

Vyacheslav Kalashnikov, José G. Florez-Muñiz, Nataliya Kalashnykova, and Vladik Kreinovich, “A Heuristic Solution of the Toll Optimal Problem With Congestion Affected Costs”, *Proceedings of the International Conference on Logistics and Supply Chains CiLOG'2016*, Mérida, Mexico, October 5–7, 2016.

Chitta Baral, Martine Ceberio, and Vladik Kreinovich, “How Neural Networks (NN) Can (Hopefully) Learn Faster by Taking Into Account Known Constraints”, *Proceedings of the Ninth International Workshop on Constraints Programming and Decision Making CoProd'2016*, Uppsala, Sweden, September 25, 2016.

Olga Kosheleva, Martine Ceberio, and Vladik Kreinovich, “When We Know the Number of Local Maxima, Then We Can Compute All of Them”, *Proceedings of the Ninth International Workshop on Constraints Programming and Decision Making CoProd’2016*, Uppsala, Sweden, September 25, 2016.

Boris Kovalerchuk and Vladik Kreinovich, “Comparison of formulations of applied tasks with interval, fuzzy set and probability approaches”, *Proceedings of the 2016 IEEE International Conference on Fuzzy Systems FUZZ-IEEE’2016*, Vancouver, Canada, July 24–29, 2016.

Hung T. Nguyen, Vladik Kreinovich, and Olga Kosheleva, “Membership Functions Representing a Number vs. Representing a Set: Proof of Unique Reconstruction”, *Proceedings of the 2016 IEEE International Conference on Fuzzy Systems FUZZ-IEEE’2016*, Vancouver, Canada, July 24–29, 2016.

Fernando Cervantes, Bryan Usevitch, Leobardo Valera, Vladik Kreinovich, and Olga Kosheleva, “Fuzzy Techniques Provide a Theoretical Explanation for the Heuristic ℓ_p -Regularization of Signals and Images”, *Proceedings of the 2016 IEEE International Conference on Fuzzy Systems FUZZ-IEEE’2016*, Vancouver, Canada, July 24–29, 2016.

Irina Perflieva, Michal Holcapek, and Vladik Kreinovich, “Adjoint Fuzzy Partition and Generalized Sampling Theorem”, *Proceedings of 16th International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems IPMU’2016*, Eindhoven, The Netherlands, June 20–24, 2016, pp. 459–469.

Andrzej Pownuk, Olga Kosheleva, and Vladik Kreinovich, “Limitations of Realistic Monte-Carlo Techniques in Estimating Interval Uncertainty”, *Proceedings of the 7th International Workshop on Reliable Engineering Computing REC’2016*, Bochum, Germany, June 15–17, 2016, pp. 269–284.

Olga Kosheleva and Vladik Kreinovich, “Voting Aggregation Leads to (Interval) Median”, *Proceedings of the 7th International Workshop on Reliable Engineering Computing REC’2016*, Bochum, Germany, June 15–17, 2016, pp. 285–298.

Salem Benferhat and Vladik Kreinovich, “Why Min-Based Conditioning”, *Proceedings of the 7th International Workshop on Reliable Engineering Computing REC’2016*, Bochum, Germany, June 15–17, 2016, pp. 327–334.

Luc Longpré, Olga Kosheleva, and Vladik Kreinovich, “How to Estimate Amount of Useful Information, in Particular Under Imprecise Probability”, *Proceedings of the 7th International Workshop on Reliable Engineering Computing REC’2016*, Bochum, Germany, June 15–17, 2016, pp. 257–268.

Michael Beer, Scott Ferson, and Vladik Kreinovich, “Do we have compatible concepts of epistemic uncertainty?”, In: H. W. Huang, J. Li, J. Zhang, and J. B. Chen (editors), *Proceedings of the 6th Asian-Pacific Symposium on Structural Reliability and its Applications APSSRA6*, May 28–30, 2016, Shanghai, China, pp. 27–37.

Mahdokht Afravi and Vladik Kreinovich, “How to Make a Solution to a Territorial Dispute More Realistic: Taking into Account Uncertainty, Emotions, and Step-by-

Step Approach”, *Proceedings of the 2016 World Conference on Soft Computing*, Berkeley, California, May 22–25, 2016, pp. 336–340.

Olga Kosheleva, and Vladik Kreinovich, and Laecio Carvalho Barros, “Chemical Kinetics in Situations Intermediate Between Usual and High Concentrations: Fuzzy-Motivated Derivation of the Formulas”, *Proceedings of the 2016 World Conference on Soft Computing*, Berkeley, California, May 22–25, 2016, pp. 332–335.

Nicolas Madrid, Irina Perfilieva, and Vladik Kreinovich, “How to Describe Measurement Uncertainty and Uncertainty of Expert Estimates?”, *Proceedings of the 2016 World Conference on Soft Computing*, Berkeley, California, May 22–25, 2016, pp. 318–322.

Stephen M. Escarzaga, Craig Tweedie, Olga Kosheleva, and Vladik Kreinovich, “How to Predict Nesting Sites and How to Measure Shoreline Erosion: Fuzzy and Probabilistic Techniques for Environment-Related Spatial Data Processing”, *Proceedings of the 2016 World Conference on Soft Computing*, Berkeley, California, May 22–25, 2016, pp. 249–252.

Fernando Cervantes, Brian Usevitch, Leobardo Valera, and Vladik Kreinovich, “Why Sparse? Fuzzy Techniques Explain Empirical Efficiency of Sparsity-Based Data- and Image-Processing Algorithms”, *Proceedings of the 2016 World Conference on Soft Computing*, Berkeley, California, May 22–25, 2016, pp. 165–169.

Pedro Barragan, Soheil Nazarian, Vladik Kreinovich, Afshin Gholamy, and Mehran Mazari, “How to Estimate Resilient Modulus for Unbound Aggregate Materials: A Theoretical Explanation of an Empirical Formula”, *Proceedings of the 2016 World Conference on Soft Computing*, Berkeley, California, May 22–25, 2016, pp. 203–207.

Martine Ceberio, Vladik Kreinovich, Hung T. Nguyen, Songsak Sriboonchitta, and Rujira Ouncharoen, “What is the Right Context for an Engineering Problem: Finding Such a Context is NP-Hard”, *Proceedings of the IEEE Symposium Series on Computational Intelligence*, Cape Town, South Africa, December 7–10, 2015, pp. 1615–1620.

Joe Lorkowski, Vladik Kreinovich, and Olga Kosheleva, “In Engineering Classes, How to Assign Partial Credit: From Current Subjective Practice to Exact Formulas (Based on Computational Intelligence Ideas)”, *Proceedings of the IEEE Symposium Series on Computational Intelligence*, Cape Town, South Africa, December 7–10, 2015, pp. 1621–1626.

Mourat Tchoshanov, Olga Kosheleva, and Vladik Kreinovich, “On the Importance of Duality and Multi-ality In Mathematics Education”, *Proceedings of the 5th International Conference “Mathematics Education: Theory and Practice” MATHEDU’2015*, Kazan, Russia, November 27–28, 2015, pp. 8–13.

Olga Kosheleva, Joe Lorkowski, Viannette Felix, and Vladik Kreinovich, “How to Take Into Account Student’s Degree of Confidence When Grading Exams”, *Proceedings of the 5th International Conference “Mathematics Education: Theory and Practice” MATHEDU’2015*, Kazan, Russia, November 27–28, 2015, pp. 29–30.

Olga Kosheleva and Vladik Kreinovich, “Oscillating Exam Averages and Their Control-Theory Explanation”, *Proceedings of the 5th International Conference “Mathematics Education: Theory and Practice” MATHEDU’2015*, Kazan, Russia, November 27–28, 2015, pp. 14–16.

Vladik Kreinovich and Olga Kosheleva, “Towards Making Theory of Computation Course More Understandable and Relevant: Recursive Functions, For-Loops, and While-Loops”, *Proceedings of the 5th International Conference “Mathematics Education: Theory and Practice” MATHEDU’2015*, Kazan, Russia, November 27–28, 2015, pp. 17–19.

Vladik Kreinovich, Olga Kosheleva, Andrzej Pownuk, and Rodrigo Romero, “How to Take into Account Model Inaccuracy When Estimating the Uncertainty of the Result of Data Processing”, *Proceedings of the ASME 2015 International Mechanical Engineering Congress & Exposition IMECE’2015*, Houston, Texas, November 13–19, 2015.

Christian Servin and Vladik Kreinovich, “How to Make Sure That Everyone Works Towards a Common Goal: Towards Optimal Incentives”, *Proceedings of the 3rd International Conference on Mathematical and Computer Modeling*, Omsk, Russia, November 12, 2015, pp. 78–80.

Geovany Ramirez, Craig Tweedie, Jason Carlsson, and Vladik Kreinovich, “How to Modify Data Processing Algorithms So That They Detect Only Dependencies Which Make Sense to Domain Experts”, *Proceedings of the 3rd International Conference on Mathematical and Computer Modeling*, Omsk, Russia, November 12, 2015, pp. 137–139.

Hung T. Nguyen, Songsak Sriboonchitta, Olga Kosheleva, and Vladik Kreinovich, “A Possible Utility-Based Explanation of Deaton’s Paradox (and Habits of Mind)”, *Proceedings of the 3rd International Conference on Mathematical and Computer Modeling*, Omsk, Russia, November 12, 2015, pp. 15–17.

Mahdokht Afravi and Vladik Kreinovich, “How to Divide a Territory: an Argument in Favor of Private Property”, *Proceedings of the 3rd International Conference on Mathematical and Computer Modeling*, Omsk, Russia, November 12, 2015, pp. 20–22.

Martine Ceberio, Olga Kosheleva, and Vladik Kreinovich, “Optimizing $\text{pred}(25)$ Is NP-Hard”, *Proceedings of the Eighth International Workshop on Constraints Programming and Decision Making CoProd’2015*, El Paso, Texas, November 6, 2015.

Martine Ceberio, Olga Kosheleva, and Vladik Kreinovich, “Constraint Approach to Multi-Objective Optimization”, *Proceedings of the Eighth International Workshop on Constraints Programming and Decision Making CoProd’2015*, El Paso, Texas, November 6, 2015.

Christian Servin and Vladik Kreinovich, “Comparisons of Measurement Results as Constraints on Accuracies of Measuring Instruments: When Can We Deter-

mine the Accuracies from These Constraints?”, *Proceedings of the Eighth International Workshop on Constraints Programming and Decision Making CoProd’2015*, El Paso, Texas, November 6, 2015.

Joe Lorkowski, Olga Kosheleva, and Vladik Kreinovich, “How to Take Into Account a Student’s Degree of Certainty When Evaluating the Test Results”, *Proceedings of the 45th ASEE/IEEE Frontiers in Education Conference FIE’2015*, El Paso, Texas, October 21–24, 2015, pp. 1568–1572.

Hung T. Nguyen, Vladik Kreinovich, Olga Kosheleva, and Songsak Sriboonchitta, “Why ARMAX-GARCH Linear Models Successfully Describe Complex Nonlinear Phenomena: A Possible Explanation”, In: Van-Nam Huynh, Masahiro Inuiguchi, and Thierry Denoeux (eds.), *Integrated Uncertainty in Knowledge Modeling and Decision Making, Proceedings of The Fourth International Symposium on Integrated Uncertainty in Knowledge Modelling and Decision Making IUKM’2015, Nha Trang, Vietnam, October 15–17, 2015*, Springer Lecture Notes in Artificial Intelligence, 2015, Vol. 9376, pp. 138–150.

Vladik Kreinovich, Hung T. Nguyen, Songsak Sriboonchitta, and Olga Kosheleva, “Why Copulas Have Been Successful in Many Practical Applications: A Theoretical Explanation Based on Computational Efficiency”, In: Van-Nam Huynh, Masahiro Inuiguchi, and Thierry Denoeux (eds.), *Integrated Uncertainty in Knowledge Modeling and Decision Making, Proceedings of The Fourth International Symposium on Integrated Uncertainty in Knowledge Modelling and Decision Making IUKM’2015, Nha Trang, Vietnam, October 15–17, 2015*, Springer Lecture Notes in Artificial Intelligence, 2015, Vol. 9376, pp. 112–125.

Vladik Kreinovich and Olga Kosheleva, “Creative Discussions or Memorization? Maybe Both? (on the example of teaching Computer Science)”, *Proceedings of the 1st International Conference on Interdisciplinary Development Research IDR’2015*, Chiang Mai, Thailand, September 17–18, 2015, to appear.

Francisco Zapata, Octavio Lerma, Leobardo Valera, and Vladik Kreinovich, “How to Speed Up Software Migration and Modernization: Successful Strategies Developed by Precisiating Expert Knowledge”, *Proceedings of the Annual Conference of the North American Fuzzy Information Processing Society NAFIPS’2015 and 5th World Conference on Soft Computing*, Redmond, Washington, August 17–19, 2015.

Vladik Kreinovich, Jonathan Quijas, Esthela Gallardo, Caio De Sa Lopes, Olga Kosheleva, and Shahnaz Shahbazova, “Simple Linear Interpolation Explains All Usual Choices in Fuzzy Techniques: Membership Functions, t-Norms, t-Conorms, and Defuzzification”, *Proceedings of the Annual Conference of the North American Fuzzy Information Processing Society NAFIPS’2015 and 5th World Conference on Soft Computing*, Redmond, Washington, August 17–19, 2015.

Chrysostomos D. Stylios and Vladik Kreinovich, “Symbolic Aggregate Approximation (SAX) under Interval Uncertainty”, *Proceedings of the Annual Conference of the North American Fuzzy Information Processing Society NAFIPS’2015 and*

5th World Conference on Soft Computing, Redmond, Washington, August 17–19, 2015.

Christian Servin, Vladik Kreinovich, and Olga Kosheleva, “From 1-D to 2-D Fuzzy: A Proof that Interval-Valued and Complex-Valued Are the Only Distributive Options”, *Proceedings of the Annual Conference of the North American Fuzzy Information Processing Society NAFIPS’2015 and 5th World Conference on Soft Computing*, Redmond, Washington, August 17–19, 2015.

Chrysostomos D. Stylios, Andrzej Pownuk, and Vladik Kreinovich, “Sometimes, It Is Beneficial to Process Different Types of Uncertainty Separately”, *Proceedings of the Annual Conference of the North American Fuzzy Information Processing Society NAFIPS’2015 and 5th World Conference on Soft Computing*, Redmond, Washington, August 17–19, 2015.

Hung T. Nguyen, Vladik Kreinovich, Joe Lorkowski, and Saiful Abu, “Why Sugeno λ -Measures”, *Proceedings of the IEEE International Conference on Fuzzy Systems FUZZ-IEEE’2015*, Istanbul, Turkey, August 1–5, 2015.

Christian Servin, Hung T. Nguyen, and Vladik Kreinovich, “How to Estimate Expected Shortfall When Probabilities Are Known with Interval or Fuzzy Uncertainty”, *Proceedings of the IEEE International Conference on Fuzzy Systems FUZZ-IEEE’2015*, Istanbul, Turkey, August 1–5, 2015.

Olga Kosheleva, Craig Tweedie, and Vladik Kreinovich, “Which Bio-Diversity Indices Are Most Adequate”, *Proceedings of the IEEE International Conference on Fuzzy Systems FUZZ-IEEE’2015*, Istanbul, Turkey, August 1–5, 2015.

Salem Benferhat, Amélie Levray, Karim Tabia, and Vladik Kreinovich, “Compatible-based conditioning in interval-based possibilistic logic”, *Proceedings of the International Joint Conference on Artificial Intelligence IJCAI’2015*, Buenos Aires, Argentina, July 25–31, 2015, pp. 2777–2783.

Olga Kosheleva and Vladik Kreinovich, “Adding possibilistic knowledge to probabilities makes many problems algorithmically decidable”, *Proceedings of the World Congress of the International Fuzzy Systems Association IFSA’2015, joint with the Annual Conference of the European Society for Fuzzy Logic and Technology EUSFLAT’2015*, Gijon, Asturias, Spain, June 30 – July 3, 2015, pp. 1452–1458.

Afshin Gholamy and Vladik Kreinovich, “How geophysicists’ intuition helps seismic data processing”, *Proceedings of the World Congress of the International Fuzzy Systems Association IFSA’2015, joint with the Annual Conference of the European Society for Fuzzy Logic and Technology EUSFLAT’2015*, Gijon, Asturias, Spain, June 30 – July 3, 2015, pp. 749–756.

Joe Lorkowski, Olga Kosheleva, and Vladik Kreinovich, “How success in a task depends on the skills level: two uncertainty-based justifications of a semi-heuristic Rasch model”, *Proceedings of the World Congress of the International Fuzzy Systems Association IFSA’2015, joint with the Annual Conference of the European Society for Fuzzy Logic and Technology EUSFLAT’2015*, Gijon, Asturias, Spain, June 30 – July 3, 2015, pp. 506–511.

Anderson Avila, Murilo Schmalfluss, Renata Reiser, and Vladik Kreinovich, “Fuzzy XOR Classes from Quantum Computing”, *Proceedings of the 14th International Conference on Artificial Intelligence and Soft Computing ICAISC'2015*, Zakopane, Poland, June 14–18, 2015, Springer Lecture Notes on Artificial Intelligence, Vol. 9120, pp. 305–371.

Salem Benferhat, Karim Tabia, Sylvain Lagrue, Vladik Kreinovich, and Martine Ceberio, “On the Normalization of Interval-Based Possibility Distributions”, *Proceedings of the Twenty-Eighth International Florida Artificial Intelligence Research Society Conference FLAIRS'28*, Hollywood, Florida, May 18–20, 2015, pp. 20–25.

Quentin Brefort, Luc Jaulin, Martine Ceberio, and Vladik Kreinovich, “If We Take Into Account that Constraints Are Soft, Then Processing Constraints Becomes Algorithmically Solvable”, *Proceedings of the IEEE Symposium on Computational Intelligence for Engineering Solutions CIES'2014*, Orlando, Florida, December 9–12, 2014, pp. 1–10.

Afshin Gholamy and Vladik Kreinovich, “Why Ricker Wavelets Are Successful in Processing Seismic Data: Towards a Theoretical Explanation”, *Proceedings of the IEEE Symposium on Computational Intelligence for Engineering Solutions CIES'2014*, Orlando, Florida, December 9–12, 2014, pp. 11–16.

L. Octavio Lerma, Craig Tweedie, and Vladik Kreinovich, “Increased Climate Variability Is More Visible Than Global Warming: A General System-Theory Explanation”, *Proceedings of the International Conference on Risk Analysis in Meteorological Disasters RAMD'2014*, Nanjing, China, October 12–13, 2014.

Vladik Kreinovich, Hung T. Nguyen, and Songsak Sriboonchitta, “Log-Periodic Power Law as a Predictor of Catastrophic Events: A New Mathematical Justification”, *Proceedings of the International Conference on Risk Analysis in Meteorological Disasters RAMD'2014*, Nanjing, China, October 12–13, 2014.

Karen Richart, Olga Kosheleva, and Vladik Kreinovich, “ r -Bounded Fuzzy Measures are Equivalent to ε -Possibility Measures”, *Proceedings of IEEE International Conference on Systems, Man, and Cybernetics SMC'2014*, San Diego, California, October 5–8, 2014, pp. 1229–1234.

Christian Servin, Aaron Velasco, and Vladik Kreinovich, “How to Estimate Relative Spatial Resolution of Different Maps or Images of the Same Area?”, *Proceedings of IEEE International Conference on Systems, Man, and Cybernetics SMC'2014*, San Diego, California, October 5–8, 2014, pp. 3507–3511.

Joe Lorkowski and Vladik Kreinovich, “How Much For an Interval? a Set? a Twin Set? a p-Box? A Kaucher Interval? Towards an Economics-Motivated Approach to Decision Making Under Uncertainty”, *Proceedings of the 16th GAMM-IMACS International Symposium on Scientific Computing, Computer Arithmetic, and Verified Numerical Computation SCAN'2014*, Wuerzburg, Germany, September 21–26, 2014, pp. 66–76.

Luc Longpré, Olga Kosheleva, and Vladik Kreinovich, “Towards the Possibility of Objective Interval Uncertainty”, *Proceedings of the 16th GAMM-IMACS In-*

International Symposium on Scientific Computing, Computer Arithmetic, and Verified Numerical Computation SCAN'2014, Wuerzburg, Germany, September 21–26, 2014, pp. 54–65.

Martine Ceberio, Olga Kosheleva, and Vladik Kreinovich, “From Global to Local Constraints: A Constructive Version of Bloch’s Principle”, *Proceedings of the Seventh International Workshop on Constraints Programming and Decision Making CoProd'2014*, Würzburg, Germany, September 21, 2014.

Martine Ceberio, Olga Kosheleva, and Vladik Kreinovich, “Range Estimation under Constraints is Computable Unless There Is a Discontinuity”, *Proceedings of the Seventh International Workshop on Constraints Programming and Decision Making CoProd'2014*, Würzburg, Germany, September 21, 2014.

Konstantin K. Semenov, Gennadi N. Solopchenko, and Vladik Kreinovich, “Inverse problems in theory and practice of measurements and metrology”, *Proceedings of the International Conference on Advanced Mathematical and Computational Tools in Metrology and Testing AMTCM'2014*, St. Petersburg, Russia, September 9–12, 2014, Paper 050.

Konstantin K. Semenov, Gennady N. Solopchenko, and Vladik Kreinovich, “Fuzzy intervals as foundation of metrological support for computations with inaccurate data”, *Proceedings of the International Conference on Advanced Mathematical and Computational Tools in Metrology and Testing AMTCM'2014*, St. Petersburg, Russia, September 9–12, 2014, Paper 088.

Joe Lorkowski, Olga Kosheleva, Vladik Kreinovich, and Sergei Soloviev, “How Design Quality Improves with Increasing Computational Abilities: General Formulas and Case Study of Aircraft Fuel Efficiency”, *Proceedings of the International Symposium on Management Engineering ISME'2014*, Kitakyushu, Japan, July 27–30, 2014, pp. 33–35.

Olga Kosheleva and Vladik Kreinovich, “How to compare different range estimations: a symmetry-based approach”, *Proceedings of the American Society of Civil Engineers (ASCE) Second International Conference on Vulnerability and Risk Analysis and Management ICVRAM'2014 and Sixth International Symposium on Uncertainty Modelling and Analysis ISUMA'2014*, Liverpool, UK, July 13–16, 2014, pp. 340–349.

Michael Beer, Marco De Angelis, and Vladik Kreinovich, “Towards Efficient Ways of Estimating Failure Probability of Mechanical Structures under Interval Uncertainty”, *Proceedings of the American Society of Civil Engineers (ASCE) Second International Conference on Vulnerability and Risk Analysis and Management ICVRAM'2014 and Sixth International Symposium on Uncertainty Modelling and Analysis ISUMA'2014*, Liverpool, UK, July 13–16, 2014, pp. 320–329.

Joe Lorkowski, Rafik Aliev, and Vladik Kreinovich, “Towards Decision Making under Interval, Set-Valued, Fuzzy, and Z-Number Uncertainty: A Fair Price Approach”, *Proceedings of the IEEE World Congress on Computational Intelligence WCCI'2014*, Beijing, China, July 6–11, 2014.

Olga Kosheleva and Vladik Kreinovich, “Approximate Nature of Traditional Fuzzy Methodology Naturally Leads to Complex-Valued Fuzzy Degrees”, *Proceedings of the IEEE World Congress on Computational Intelligence WCCI'2014*, Beijing, China, July 6–11, 2014.

Hung T. Nguyen, Vladik Kreinovich, and Olga Kosheleva, “And’- and “Or”-Operations for “Double”, “Triple”, etc. Fuzzy Sets”, *Proceedings of the IEEE World Congress on Computational Intelligence WCCI'2014*, Beijing, China, July 6–11, 2014.

Christian Servin and Vladik Kreinovich, “Towards Efficient Algorithms for Approximating a Fuzzy Relation by Fuzzy Rules: Case When “And”- and “Or”-Operation are Distributive”, *Proceedings of the 2014 Annual Conference of the North American Fuzzy Information Processing Society NAFIPS'2014*, Boston, Massachusetts, June 24–26, 2014.

Francisco Zapata, Olga Kosheleva, and Vladik Kreinovich, “Wiener’s Conjecture About Transformation Groups Helps Predict Which Fuzzy Techniques Work Better”, *Proceedings of the 2014 Annual Conference of the North American Fuzzy Information Processing Society NAFIPS'2014*, Boston, Massachusetts, June 24–26, 2014.

Joe Lorkowski and Vladik Kreinovich, “Interval and Symmetry Approaches to Uncertainty – Pioneered by Wiener – Help Explain Seemingly Irrational Human Behavior: A Case Study”, *Proceedings of the 2014 Annual Conference of the North American Fuzzy Information Processing Society NAFIPS'2014*, Boston, Massachusetts, June 24–26, 2014.

Olga Kosheleva and Vladik Kreinovich, “Decision Making under Interval Uncertainty: What Can and What Cannot Be Computed in Linear Time and in Real Time”, *Proceedings of the 6th International Workshop on Reliable Engineering Computing REC'2014*, Chicago, Illinois, May 25–28, 2014, pp. 116–124.

Luis Gutierrez, Martine Ceberio, Vladik Kreinovich, Rebekah L. Gruver, Marianna Peña, Matthew J. Rister, Abraham Saldaña, John Vasquez, Janelle Ybarra, and Salem Benferhat, “From Interval-Valued Probabilities to Interval-Valued Possibilities: Case Studies of Interval Computation under Constraints”, *Proceedings of the 6th International Workshop on Reliable Engineering Computing REC'2014*, Chicago, Illinois, May 25–28, 2014, pp. 77–95.

Gang Xiang, Jason O’Rawe, Vladik Kreinovich, Janos Hajagos, and Scott Ferson, “Protecting patient privacy while preserving medical information for research”, *Proceedings of the 6th International Workshop on Reliable Engineering Computing REC'2014*, Chicago, Illinois, May 25–28, 2014, pp. 281–293.

Joe Lorkowski and Vladik Kreinovich, “Fuzzy Logic Ideas Can Help in Explaining Kahneman and Tversky’s Empirical Decision Weights”, *Proceedings of the 4th World Conference on Soft Computing*, Berkeley, California, May 25–27, 2014, pp. 285–289.

Vladik Kreinovich and Olga Kosheleva, “Logic of Scientific Discovery: How Physical Induction Affects What Is Computable”, *Proceedings of the The International Interdisciplinary Conference Philosophy, Mathematics, Linguistics: Aspects of Interaction 2014 PhML’2014*, St. Petersburg, Russia, April 21–25, 2014, pp. 116–127.

Gözde Ulutagay and Vladik Kreinovich, “Density-Based Fuzzy Clustering as a First Step to Learning Rules: Challenges and Solutions”, *Proceedings of 3rd World Conference on Soft Computing*, San Antonio, December 15–18, 2013, pp. 357–372.

Michal Holčapek and Vladik Kreinovich, “Processing Quantities with Heavy-Tailed Distribution of Measurement Uncertainty: How to Estimate the Tails of the Results of Data Processing”, *Proceedings of 3rd World Conference on Soft Computing*, San Antonio, December 15–18, 2013, pp. 25–32.

Olga Kosheleva, Vladik Kreinovich, and Thavatchai Ngamsantivong, “Fuzzy Sets Can Be Interpreted as Limits of Crisp Sets, and This Can Help to Fuzzify Crisp Notions”, *Proceedings of 3rd World Conference on Soft Computing*, San Antonio, December 15–18, 2013, pp. 327–337.

Joshua Day, Ali Jalal-Kamali, and Vladik Kreinovich, “Computing Covariance and Correlation in Optimally Privacy-Protected Statistical Databases: Feasible Algorithms”, *Proceedings of 3rd World Conference on Soft Computing*, San Antonio, December 15–18, 2013, pp. 373–382.

Christian Servin, Aline Jaimes, Craig Tweedie, Aaron Velasco, Omar Ochoa, and Vladik Kreinovich, “How to Gauge Accuracy of Measurements and of Expert Estimates: Beyond Normal Distributions”, *Proceedings of 3rd World Conference on Soft Computing*, San Antonio, December 15–18, 2013, pp. 339–346.

Bui Cong Cuong and Vladik Kreinovich, “Picture Fuzzy Sets – a new concept for computational intelligence problems”, *Proceedings of the Third World Congress on Information and Communication Technologies WICT’2013*, Hanoi, Vietnam, December 15–18, 2013, pp. 1–6.

Juan Carlos Figueroa Garcia, Martine Ceberio, and Vladik Kreinovich, “Algebraic Product is the Only t-Norm for Which Optimization Under Fuzzy Constraints is Scale-Invariant”, *Proceedings of the Sixth International Workshop on Constraints Programming and Decision Making CoProd’2013*, El Paso, Texas, November 1, 2013, pp. 8–11.

Martine Ceberio, Olga Kosheleva, and Vladik Kreinovich, “Towards a Physically Meaningful Definition of Computable Discontinuous and Multi-Valued Functions (Constraints)”, *Proceedings of the Sixth International Workshop on Constraints Programming and Decision Making CoProd’2013*, El Paso, Texas, November 1, 2013, pp. 22–26.

Olga Kosheleva, Martine Ceberio, and Vladik Kreinovich, “Peak-End Rule: A Utility-Based Explanation”, *Proceedings of the Sixth International Workshop on Constraints Programming and Decision Making CoProd’2013*, El Paso, Texas, November 1, 2013, pp. 12–16.

Olga Kosheleva, Vladik Kreinovich, Ariel Garcia, Felipe Jovel, Luis Torres Escobedo, and Thavatchai Ngamsantivong, “Computing with Words: Towards a New Tuple-Based Formalization”, *Proceedings of the IEEE International Conference on Systems, Man, and Cybernetics IEEE SMC’2013*, Manchester, UK, October 13–16, 2013, pp. 344–349.

Vladik Kreinovich, Olga Kosheleva, Jorge Y. Cabrera, Mario Gutierrez, and Thavatchai Ngamsantivong, “A Symmetry-Based Approach to Selecting Membership Functions and Its Relation to Chemical Kinetics”, *Proceedings of the IEEE International Conference on Systems, Man, and Cybernetics IEEE SMC’2013*, Manchester, UK, October 13–16, 2013, pp. 339–343.

Enrique Portillo, Olga Kosheleva, and Vladik Kreinovich, “Towards Discrete Interval, Set, and Fuzzy Computations”, *Proceedings of the IEEE International Conference on Systems, Man, and Cybernetics IEEE SMC’2013*, Manchester, UK, October 13–16, 2013, pp. 322–327.

Matthias Stein, Michael Beer, and Vladik Kreinovich, “Fuzziness and Bayesian Analysis in Engineering”, *Proceedings of the 59th World Statistics Congress*, Hong Kong, China, August 25–30, 2013.

Irina Perfilieva and Vladik Kreinovich, “F-transform in View of Aggregation Functions”, *Proceedings of the 7th International Summer School on Aggregation Operations AGOP’2013*, Pamplona, Spain, July 16–20, 2013.

Vladik Kreinovich, Irina Perfilieva, and Vilem Novak, “Why Inverse F-transform? A Compression-Based Explanation”, *Proceedings of the 2013 International Conference on Fuzzy Systems FUZZ-IEEE’2013*, Hyderabad, India, July 7–10, 2013, pp. 1378–1384.

Renata Hax Sander Reiser, Adriano Maron, Lidiana Visintin, Ana Maria Abeijon, and Vladik Kreinovich, “Relation Between Polling and Likert-Scale Approaches to Eliciting Membership Degrees Clarified by Quantum Computing”, *Proceedings of the 2013 International Conference on Fuzzy Systems FUZZ-IEEE’2013*, Hyderabad, India, July 7–10, 2013, pp. 1222–1227.

Lidiane Visintin, Adriano Maron, Renata Reiser, Ana Maria Abeijon, and Vladik Kreinovich, “Aggregation Operations from Quantum Computing”, *Proceedings of the 2013 International Conference on Fuzzy Systems FUZZ-IEEE’2013*, Hyderabad, India, July 7–10, 2013, pp. 1124–1131.

Olga Kosheleva, Vladik Kreinovich, and Thavatchai Ngamsantivong, “Why Complex-Valued Fuzzy? Why Complex Values in General? A Computational Explanation”, *Proceedings of the Joint World Congress of the International Fuzzy Systems Association and Annual Conference of the North American Fuzzy Information Processing Society IFSA/NAFIPS’2013*, Edmonton, Canada, June 24–28, 2013, pp. 1233–1236.

Joe Lorkowski and Vladik Kreinovich, “Likert-Scale Fuzzy Uncertainty from a Traditional Decision Making Viewpoint: It Incorporates Both Subjective Probabilities

and Utility Information”, *Proceedings of the Joint World Congress of the International Fuzzy Systems Association and Annual Conference of the North American Fuzzy Information Processing Society IFSA/NAFIPS’2013*, Edmonton, Canada, June 24–28, 2013, pp. 525–530.

Vladik Kreinovich and Andres Ortiz, “Towards a Better Understanding of Space-Time Causality: Kolmogorov Complexity and Causality as a Matter of Degree”, *Proceedings of the Joint World Congress of the International Fuzzy Systems Association and Annual Conference of the North American Fuzzy Information Processing Society IFSA/NAFIPS’2013*, Edmonton, Canada, June 24–28, 2013, pp. 1349–1353.

Ali Jalal-Kamali and Vladik Kreinovich, “Estimating Third Central Moment C_3 for Privacy Case under Interval and Fuzzy Uncertainty”, *Proceedings of the Joint World Congress of the International Fuzzy Systems Association and Annual Conference of the North American Fuzzy Information Processing Society IFSA/NAFIPS’2013*, Edmonton, Canada, June 24–28, 2013, pp. 454–459.

Michael Beer and Vladik Kreinovich, “Comparing intervals and moments for the quantification of coarse information”, *Proceedings of the Mini-Symposium “Engineering Analyses with Vague and Imprecise Information” at the 11th International Conference on Structural Safety and Reliability*, New York, June 16–20, 2013.

Christopher Kiekintveld, Md. Towhidul Islam, and Vladik Kreinovich, “Security Game with Interval Uncertainty”, In: T. Ito, C. Jonker, M. Gini, and O. Shehory (eds.), *Proceedings of The Twelfth International Conference on Autonomous Agents and Multiagent Systems AAMAS’2013*, Saint Paul, Minnesota, May 6–10, 2013, pp. 231–238.

Gang Xiang and Vladik Kreinovich, “Data Anonymization that Leads to the Most Accurate Estimates of Statistical Characteristics”, *Proceedings of the IEEE Symposium on Computational Intelligence for Engineering Solutions CIES’2013*, Singapore, April 16–19, 2013, pp. 163–170.

Konstantin K. Semenov and Vladik Kreinovich, “From p-Boxes to p-Ellipsoids: Towards an Optimal Representation of Imprecise Probabilities”, *Proceedings of the IEEE Symposium on Computational Intelligence for Engineering Solutions CIES’2013*, Singapore, April 16–19, 2013, pp. 149–156.

Olga Kosheleva and Vladik Kreinovich, “How to Divide Students into Groups so as to Optimize Learning: Towards a Solution to a Pedagogy-Related Optimization Problem”, *Proceedings of the IEEE International Conference on Systems, Man, and Cybernetics IEEE SMC’2012*, Seoul, Korea, October 14–17, 2012, pp. 1948–1953.

Roberto Araiza, Vladik Kreinovich, and Juan Ferret, “Equations Without Equations: Challenges on a Way to a More Adequate Formalization of Causality Reasoning in Physics”, *Proceedings of the Workshop on Informatics and Information Technologies in Education: Theory, Applications, Didactics*, Novosibirsk, Russia, September 26–29, 2012, Vol. 1, pp. 7–19.

Olga Kosheleva and Vladik Kreinovich, “How to Define Average Class Size (and Deviations from the Average Class Size) in a Way Which Is Most Adequate for Teaching Effectiveness”, *Proceedings of the Workshop on Informatics and Information Technologies in Education: Theory, Applications, Didactics*, Novosibirsk, Russia, September 26–29, 2012, Vol. 1, pp. 113–120.

V. Novak, I. Perfilieva, and V. Kreinovich, “F-transform in the analysis of periodic signals”, In: M. Inuiguchi, Y. Kusunoki, and M. Seki (eds.), *Proceedings of the 15th Czech-Japan Seminar on Data Analysis and Decision Making under Uncertainty CJS’2012*, Osaka, Japan, September 24–27, 2012.

Irina Perfilieva, Vladik Kreinovich, and Vilem Novak, “F-transform in view of trend extraction”, In: M. Inuiguchi, Y. Kusunoki, and M. Seki (eds.), *Proceedings of the 15th Czech-Japan Seminar on Data Analysis and Decision Making under Uncertainty CJS’2012*, Osaka, Japan, September 24–27, 2012.

E. Cabral Balreira, Olga Kosheleva, and Vladik Kreinovich, “Algorithmics of Checking Whether a Mapping Is Injective, Surjective, and/or Bijective”, *Proceedings of the Fifth International Workshop on Constraint Programming and Decision Making CoProD’12*, Novosibirsk, Russia, September 23, 2012.

Martine Ceberio, Olga Kosheleva, and Vladik Kreinovich, “Simplicity Is Worse Than Theft: A Constraint-Based Explanation of a Seemingly Counter-Intuitive Russian Saying”, *Proceedings of the Fifth International Workshop on Constraint Programming and Decision Making CoProD’12*, Novosibirsk, Russia, September 23, 2012.

Ali Jalal-Kamali, Martine Ceberio, and Vladik Kreinovich, “Constraint Optimization: From Efficient Computation of What Can Be Achieved to Efficient Computation of a Way to Achieve The Corresponding Optimum”, *Proceedings of the Fifth International Workshop on Constraint Programming and Decision Making CoProD’12*, Novosibirsk, Russia, September 23, 2012.

Vladik Kreinovich, Leonid Reznik, Konstantin K. Semenov, and Gennady N. Solopchenko, “Metrological self-assurance of data processing software”, *Proceedings of the XX IMEKO World Congress: Metrology for Green Growth*, Busan, Korea, September 9–14, 2012.

Rafik Aliev, Oleg Huseynov, and Vladik Kreinovich, “Decision Making under Interval and Fuzzy Uncertainty: Towards an Operational Approach”, *Proceedings of the Tenth International Conference on Application of Fuzzy Systems and Soft Computing ICAFS’2012*, Lisbon, Portugal, August 29–30, 2012.

Murad Alaqtash, Thompson Sarkodie-Gyan, and Vladik Kreinovich, “Assessment of Functional Impairment in Human Locomotion: A Fuzzy-Motivated Approach”, *Proceedings of the 2012 Annual Conference of the North American Fuzzy Information Processing Society NAFIPS’2012*, Berkeley, California, August 6–8, 2012.

Karen Villaverde and Vladik Kreinovich, “Local Extrema under Interval Uncertainty: Multi-D Case”, *Proceedings of the 2012 Annual Conference of the North*

American Fuzzy Information Processing Society NAFIPS'2012, Berkeley, California, August 6–8, 2012.

Vladik Kreinovich, Nitaya Buntao, and Olga Kosheleva, “Optimizing Computer Representation and Computer Processing of Epistemic Uncertainty for Risk-Informed Decision Making: Finances etc.”, *Proceedings of the International Conference on Probabilistic Safety Assessment and Management / European Safety and Reliability PSAM'11/ESREL'12*, Helsinki, Finland, June 25–29, 2012.

Jaime Nava, Olga Kosheleva, and Vladik Kreinovich, “Why Bernstein Polynomials Are Better: Fuzzy-Inspired Justification”, *Proceedings of the 2012 IEEE World Congress on Computational Intelligence WCCI'2012*, Brisbane, Australia, June 10–15, 2012, pp. 1986–1991.

Karen Villaverde, Nagwa Albeheri, Tonghui Wang, and Vladik Kreinovich, “Semi-Heuristic Poverty Measures Used by Economists: Justification Motivated by Fuzzy Techniques”, *Proceedings of the 2012 IEEE World Congress on Computational Intelligence WCCI'2012*, Brisbane, Australia, June 10–15, 2012, pp. 1603–1609.

Vladik Kreinovich, “Research-related projects for graduate students as a tool to motivate graduate students in classes outside their direct interest areas”, In: Arunkumar Pennathur, Vivek Tandon, and Louis Everett (eds.), *Proceedings of the 2012 Annual Gulf Southwest Conference of the American Society of Engineering Education ASEE-GSW'2012 “Bridging Theory and Practice in Engineering and Technology Education”*, El Paso, Texas, April 4–6, 2012, pp. 1–9.

Christopher Kiekintveld and Vladik Kreinovich, “Efficient approximation for security games with interval uncertainty”, *Proceedings of the AAAI Spring Symposium on Game Theory for Security, Sustainability, and Health GTSSH'2012*, Stanford, March 26–28, 2012.

Vladik Kreinovich, Hung T. Nguyen, and Songsak Sriboonchitta, “Prediction in Econometrics: Towards Mathematical Justification of Simple (and Successful) Heuristics”, *Proceedings of the Fifth International Conference of the Thailand Econometric Society*, Chiang Mai, Thailand, January 12–13, 2012.

Vladik Kreinovich, Christelle Jacob, Didier Dubois, Janette Cardoso, Martine Ceberio, and Ildar Batyrshin, “Estimating Probability of Failure of a Complex System Based on Inexact Information about Subsystems and Components, with Potential Applications to Aircraft Maintenance”, In: I. Batyrshin and G. Sidorov (eds.), *Proceedings of the 10th Mexican International Conference on Artificial Intelligence MICAI'2011*, Puebla, Mexico, November 26 – December 4, 2011, Springer Lecture Notes in Artificial Intelligence, Vol. 7905, pp. 70–81.

Martine Ceberio and Vladik Kreinovich, “No-Free-Lunch Result for Interval and Fuzzy Computing: When Bounds Are Unusually Good, Their Computation is Unusually Slow”, In: I. Batyrshin and G. Sidorov (eds.), *Proceedings of the 10th Mexican International Conference on Artificial Intelligence MICAI'2011*, Puebla, Mexico, November 26 - December 4, 2011, Springer Lecture Notes in Artificial Intelligence, Vol. 7905, pp. 13–23.

Jan Sliwka, Luc Jaulin, Martine Ceberio, and Vladik Kreinovich, “Processing Interval Sensor Data in the Presence of Outliers, with Potential Applications to Localizing Underwater Robots”, *Proceedings of the 2011 IEEE International Conference on Systems, Man, and Cybernetics SMC’2011*, Anchorage, Alaska, October 9–12, 2011, pp. 2330–2337.

Vladik Kreinovich, “Dynamic Fuzzy Logic Leads to More Adequate ‘And’ and ‘Or’ Operations”, *Proceedings of the 2011 Sixth International Conference on Soft Computing, Computing with Words and Perceptions in System Analysis, Decision and Control ICSCCW’2011*, Antalya, Turkey, September 1–2, 2011, pp. 21–29.

Rafik Aliev and Vladik Kreinovich, “Estimating Mean and Variance under Interval Uncertainty: Dynamic Case”, *Proceedings of the 2011 Sixth International Conference on Soft Computing, Computing with Words and Perceptions in System Analysis, Decision and Control ICSCCW’2011*, Antalya, Turkey, September 1–2, 2011, pp. 85–93.

Octavio Lerma, Vladik Kreinovich, and Christopher Kiekintveld, “Linear-Time Resource Allocation in Security Games with Identical Fully Protective Resources”, *Proceedings of the AAI Workshop on Applied Adversarial Reasoning and Risk Modeling AARM’11*, San Francisco, California, August 7, 2011.

Vladik Kreinovich, “Towards Faster Estimation of Statistics and ODEs Under Interval, P-Box, and Fuzzy Uncertainty: From Interval Computations to Rough Set-Related Computations”, In: Sergey O. Kuznetsov et al. (Eds.) *Proceedings of the Thirteenth International Conference on Rough Sets, Fuzzy Sets and Granular Computing RSFDGrC’2011 (Moscow, Russia, June 25–27, 2011)*, Springer Lecture Notes on Artificial Intelligence LNAI, Springer-Verlag, Berlin, Heidelberg, 2011, Vol. 6743, pp. 3–10.

Christelle Jacob, Didier Dubois, Janette Cardoso, Martine Ceberio, and Vladik Kreinovich, “Estimating Probability of Failure of a Complex System Based on Partial Information about Subsystems and Components, with Potential Applications to Aircraft Maintenance”, *Proceedings of the International Workshop on Soft Computing Applications and Knowledge Discovery SCAKD’2011*, Moscow, Russia, June 25, 2011, pp. 30–41.

Irina Perfilieva and Vladik Kreinovich, “Towards a General Description of Translation-Invariant and Translation-Covariant Linear Transformations: A Natural Justification of Fourier Transforms and Fuzzy Transforms”, *Proceedings of the World Congress of the International Fuzzy Systems Association IFSA’2011*, Surabaya and Bali Island, Indonesia, June 21–25, 2011.

Nitaya Buntao and Vladik Kreinovich, “Measures of Deviation (and Dependence) for Heavy-Tailed Distributions and their Estimation under Interval and Fuzzy Uncertainty”, In: Ronald R. Yager, Marek Z. Reformat, Shahnaz N. Shahbazova, and Sergei Ovchinnikov (eds.), *Proceedings of the World Conference on Soft Computing*, San Francisco, CA, May 23–26, 2011.

Ali Jalal-Kamali, Vladik Kreinovich, and Luc Longpré, “Estimating Covariance for Privacy Case under Interval (and Fuzzy) Uncertainty”, In: Ronald R. Yager, Marek

Z. Reformat, Shahnaz N. Shahbazova, and Sergei Ovchinnikov (eds.), *Proceedings of the World Conference on Soft Computing*, San Francisco, CA, May 23–26, 2011.

Chris Kiekintveld, Vladik Kreinovich, and Octavio Lerma, “Optimizing Trajectories for Unmanned Aerial Vehicles (UAVs) Patrolling the Border”, In: Ronald R. Yager, Marek Z. Reformat, Shahnaz N. Shahbazova, and Sergei Ovchinnikov (eds.), *Proceedings of the World Conference on Soft Computing*, San Francisco, CA, May 23–26, 2011.

Vladik Kreinovich, “From Processing Interval-Valued Fuzzy Data to General Type-2: Towards Fast Algorithms”, *Proceedings of the IEEE Symposium on Advances in Type-2 Fuzzy Logic Systems T2FUZZ’2011*, part of the IEEE Symposium Series on Computational Intelligence, Paris, France, April 11–15, 2011, pp. ix–xii.

Eric Gutierrez and Vladik Kreinovich, “Fundamental physical equations can be derived by applying fuzzy methodology to informal physical ideas”, *Proceedings of the 30th Annual Conference of the North American Fuzzy Information Processing Society NAFIPS’2011*, El Paso, Texas, March 18–20, 2011.

Carlos Ferregut, F. Joshua Campos, and Vladik Kreinovich, “Reducing over-conservative expert failure rate estimates in the presence of limited data: a new probabilistic/fuzzy approach”, *Proceedings of the 30th Annual Conference of the North American Fuzzy Information Processing Society NAFIPS’2011*, El Paso, Texas, March 18–20, 2011.

Andre Lemos, Vladik Kreinovich, Walmir Caminhas and Fernando Gomide, “Universal approximation with uninorm-based fuzzy neural networks”, *Proceedings of the 30th Annual Conference of the North American Fuzzy Information Processing Society NAFIPS’2011*, El Paso, Texas, March 18–20, 2011.

Octavio Lerma, Craig Tweedie, and Vladik Kreinovich, “Towards optimal sensor placement in multi-zone measurements”, *Proceedings of the 30th Annual Conference of the North American Fuzzy Information Processing Society NAFIPS’2011*, El Paso, Texas, March 18–20, 2011.

Omar Ochoa, Aaron Velasco, and Vladik Kreinovich, “Fusing Continuous and Discrete Data, on the Example of Merging Seismic and Gravity Models in Geophysics”, *Proceedings of the 30th Annual Conference of the North American Fuzzy Information Processing Society NAFIPS’2011*, El Paso, Texas, March 18–20, 2011.

Vladik Kreinovich, “Under Physics-Motivated Constraints, Generally-Non-Algorithmic Computational Problems Become Algorithmically Solvable”, *Proceedings of the Fourth International Workshop on Constraint Programming and Decision Making CoProD’11*, El Paso, Texas, March 17, 2011.

Olga Kosheleva, Martine Ceberio, and Vladik Kreinovich, “Adding Constraints – A (Seemingly Counterintuitive but) Useful Heuristic in Solving Difficult Problems”, *Proceedings of the Fourth International Workshop on Constraint Programming and Decision Making CoProD’11*, El Paso, Texas, March 17, 2011.

Uram Anibal Sosa Aguirre, Martine Ceberio, and Vladik Kreinovich, “Why Curvature in L-Curve: Combining Soft Constraints”, *Proceedings of the Fourth International Workshop on Constraint Programming and Decision Making CoProD’11*, El Paso, Texas, March 17, 2011.

Paden Portillo, Martine Ceberio, and Vladik Kreinovich, “Towards an Efficient Bisection of Ellipsoids”, *Proceedings of the ITEA Live-Virtual-Constructive Conference “Test and Evaluation”*, El Paso, Texas, January 24–27, 2011.

Vladik Kreinovich, Van Nam Huynh, and Yohiteru Nakamori, “Towards a More Adequate Defuzzification of Interval-Valued Fuzzy Sets”, *Proceedings of the 7th International Conference on Modeling Decisions for Artificial Intelligence MDAI’2010*, Perpignan, French Catalonia, France, October 27–29, 2010.

Hung T. Nguyen and Vladik Kreinovich, “Optimal Prices in the Presence of Discounts: A New Economic Application of Choquet Integrals”, *Proceedings of the International Symposium on Innovative Management, Information, and Production IMIP’2010*, Hangzhou, China, October 9–11, 2010, pp. 366–370.

Vladik Kreinovich, Jaime Nava, Rodrigo Romero, Julio Olaya, Aaron Velasco, and Kate C. Miller, “Spatial Resolution for Processing Seismic Data: Type-2 Methods for Finding the Relevant Granular Structure”, *Proceedings of the IEEE International Conference on Granular Computing GrC’2010*, Silicon Valley, USA, August 14–16, 2010.

Aline Jaimes, Craig Tweedie, Tanja Magoč, Vladik Kreinovich, and Martine Ceberio, “Multi-Objective Optimization under Positivity Constraints, with a Meteorological Example”, *Proceedings of the IEEE World Congress on Computational Intelligence WCCI’2010*, Barcelona, Spain, July 18–23, 2010, pp. 2355–2361.

Vladik Kreinovich and Olga Kosheleva, “Towards a More Natural Proof of Metrization Theorem for Space-Times”, *Proceedings of the IEEE World Congress on Computational Intelligence WCCI’2010*, Barcelona, Spain, July 18–23, 2010, pp. 3098–3105.

Gang Xiang and Vladik Kreinovich, “Towards Improved Trapezoidal Approximation to Intersection (Fusion) of Trapezoidal Fuzzy Numbers: Specific Procedure and General Non-Associativity Theorem”, *Proceedings of the IEEE World Congress on Computational Intelligence WCCI’2010*, Barcelona, Spain, July 18–23, 2010, pp. 3120–3125.

Tanja Magoc and Vladik Kreinovich, “How to Relate Fuzzy and OWA Estimates”, *Proceedings of the Annual Conference of the North American Fuzzy Information Processing Society NAFIPS’2010*, Toronto, Canada, July 12–14, 2010, pp. 361–366.

Gang Xiang and Vladik Kreinovich, “Extending Maximum Entropy Techniques to Entropy Constraints”, *Proceedings of the Annual Conference of the North American Fuzzy Information Processing Society NAFIPS’2010*, Toronto, Canada, July 12–14, 2010, pp. 367–373.

Omar Ochoa, Aaron A. Velasco, Christian Servin, and Vladik Kreinovich, “Model Fusion under Probabilistic and Interval Uncertainty, with Application to Earth Sciences”, In: Michael Beer, Rafi L. Muhanna, and Robert L. Mullen (Eds.), *Proceedings of the 4th International Workshop on Reliable Engineering Computing REC’2010*, Singapore, March 3–5, 2010, pp. 81–100.

Aline Jaimes, Craig Tweedie, Tanja Magoč, Vladik Kreinovich, and Martine Ceberio, “Optimal Sensor Placement in Environmental Research: Designing a Sensor Network under Uncertainty”, In: Michael Beer, Rafi L. Muhanna, and Robert L. Mullen (Eds.), *Proceedings of the 4th International Workshop on Reliable Engineering Computing REC’2010*, Singapore, March 3–5, 2010, pp. 255–267.

Olga Kosheleva and Vladik Kreinovich, “Towards Optimal Effort Distribution in Process Design under Uncertainty, with Application to Education”, In: Michael Beer, Rafi L. Muhanna, and Robert L. Mullen (Eds.), *Proceedings of the 4th International Workshop on Reliable Engineering Computing REC’2010*, Singapore, March 3–5, 2010, pp. 509–525.

Songsak Sriboonchitta, Hung T. Nguyen, and Vladik Kreinovich, “How to Relate Spectral Risk Measures and Utilities”, *Proceedings of the Third Conference of Thailand Econometric Society*, Chiang Mai, Thailand, January 7–8, 2010, pp. 8–19.

Olga Kosheleva, Martine Ceberio, and Vladik Kreinovich, “Why Tensors?”, In: Martine Ceberio (ed.), *Abstracts of the Second Workshop on Constraint Programming and Decision Making CoProD’09*, El Paso, Texas, November 9–10, 2009, pp. 20–23.

Martine Ceberio and Vladik Kreinovich, “Continuous If-Then Statements Are Computable”, In: Martine Ceberio (ed.), *Abstracts of the Second Workshop on Constraint Programming and Decision Making CoProD’09*, El Paso, Texas, November 9–10, 2009, pp. 11–14.

Aline Jaimes, Craig Tweedy, Tanja Magoc, Vladik Kreinovich, and Martine Ceberio, “Selecting the Best Location for a Meteorological Tower: A Case Study of Multi-Objective Constraint Optimization”, In: Martine Ceberio (ed.), *Abstracts of the Second Workshop on Constraint Programming and Decision Making CoProD’09*, El Paso, Texas, November 9–10, 2009, pp. 56–60.

Vladik Kreinovich and Irina Perfilieva, “From Gauging Accuracy of Quantity Estimates to Gauging Accuracy and Resolution of Measuring Physical Fields”, In: Roman Wyrzykowski, Jack Dongarra, Konrad Kzrczewski, and Jerzy Wasniewski (eds.), *Proceedings of the Eighth International Conference on Parallel Processing and Applied Mathematics PPAM’2009*, Wroclaw, Poland, September 13–16, 2009, Springer Lecture Notes in Computer Science, 2010, Vol. 6608, pp. 456–465.

Vladik Kreinovich, “From Interval Computations to Constraint-Related Set Computations: Towards Faster Estimation of Statistics and ODEs Under Interval and P-Box Uncertainty”, In: Andrej Bauer, Ruth Dillhage, Peter Hertling, Ker-I Ko, and Robert Rettinger (eds.), *Proceedings of the Sixth International Conference on*

Computability and Complexity in Analysis CCA '2009, Ljubljana, Slovenia, August 18–22, 2009, pp. 4–15.

Hung T. Nguyen, Vladik Kreinovich, and Songsak Sriboonchitta, “Stochastic Volatility Models and Financial Risk Measures: Towards New Justifications”, *Proceedings of the 2009 Singapore Economic Review Conference*, Singapore, August 6–8, 2009.

Vladik Kreinovich and Hung T. Nguyen, “Towards A Neural-Based Understanding of the Cauchy Deviate Method for Processing Interval and Fuzzy Uncertainty”, *Proceedings of the 2009 World Congress of the International Fuzzy Systems Association IFSA*, Lisbon, Portugal, July 20–24, 2009, pp. 1264–1269.

Vladik Kreinovich, “From Interval Computations to Constraint-Related Set Computations: Towards Faster Estimation of Statistics and ODEs Under Interval and P-Box Uncertainty”, In: Alexander K. Belyaev and Robin S. Langley (eds.), *Proceedings of the International Union for Theoretical and Applied Mechanics (IUTAM) Symposium on The Vibration Analysis of Structures with Uncertainties*, Saint Petersburg, Russia, July 6–10, 2009, Springer Verlag, Dordrecht, Heidelberg, London, New York, 2011, pp. 85–98.

Gennady N. Solopchenko, Konstantin K. Semenov, Vladik Kreinovich, and Leon Reznik, “Measurement’s result and its error as fuzzy variables: background and perspectives”, *Proceedings of the 9th International Symposium on Measurement Technology and Intelligent Instruments ISMTII'2009*, St. Petersburg, Russia, June 28 – July 2, 2009, pp. 4-132 – 4-136.

Tanja Magoč and Vladik Kreinovich, “Empirical Formulas for Economic Fluctuations: Towards A New Justification”, *Proceedings of the 28th North American Fuzzy Information Processing Society Annual Conference NAFIPS'09*, Cincinnati, Ohio, June 14–17, 2009.

Olga Kosheleva and Vladik Kreinovich, “What is the Best Way to Distribute Efforts Among Students: Towards Quantitative Approach to Human Cognition”, *Proceedings of the 28th North American Fuzzy Information Processing Society Annual Conference NAFIPS'09*, Cincinnati, Ohio, June 14–17, 2009.

Vladik Kreinovich, “Expert Knowledge Is Needed for Design under Uncertainty: For p-Boxes, Backcalculation is, in General, NP-Hard”, *Proceedings of the 28th North American Fuzzy Information Processing Society Annual Conference NAFIPS'09*, Cincinnati, Ohio, June 14–17, 2009.

Van Nam Huynh, Chenyi Hu, Yoshiteru Nakamori, and Vladik Kreinovich, “On Decision Making under Interval Uncertainty: A New Justification of Hurwicz Optimism-Pessimism Approach and Its Use in Group Decision Making”, *Proceedings of the 39th International Symposium on Multiple-Valued Logic ISMVL'2009*, Naha, Okinawa, Japan, May 21–23, 2009.

Irina Perfilieva and Vladik Kreinovich, “From Gauging Accuracy of Quantity Estimates to Gauging Accuracy and Resolution of Measuring Physical Fields: A

Broad Prospective on Fuzzy Transforms”, *Abstracts of the 10th International Student Conference on Applied Mathematics and Informatics ISCAMI*, Malenovice, Czech Republic, May 13–15, 2009.

Vladik Kreinovich, “Astronomical Tests of Relativity: Beyond Parameterized Post-Newtonian Formalism (PPN), to Testing Fundamental Principles”, In: Sergei Klioner, P. Ken Seidelmann, and Michael H. Soffel (eds.), *Relativity in Fundamental Astronomy, Proceedings of IAU Symposium No. 261*, Cambridge University Press, Cambridge, UK, 2009, pp. 56–61.

Oscar Castillo, Patricia Melin, Esteban Gamez, Vladik Kreinovich and Olga Kosheleva, “Intelligence Techniques Are Needed to Further Enhance the Advantage of Groups with Diversity in Problem Solving”, *Proceedings of the 2009 IEEE Workshop on Hybrid Intelligent Models and Applications HIMA’2009*, Nashville, Tennessee, March 30–April 2, 2009.

Vladik Kreinovich, Hung T. Nguyen, and Songsak Sriboonchita, “Estimating Risk under Interval Uncertainty: Sequential and Parallel Algorithms”, *Proceedings of the 2nd Annual Econometric Conference*, Chiang Mai, Thailand, January 5–6, 2009, pp. 47–60.

Van Nam Huynh and Vladik Kreinovich, “Towards a more adequate use of interval-valued fuzzy techniques in intelligent control: a fuzzy analogues of unimodality”, *Proceedings of the International Workshop on Soft Computing for Knowledge Technology*, in conjunction with The Tenth Pacific Rim International Conference on Artificial Intelligence PRICAI’08, Hanoi, Vietnam, December 15–19, 2008, pp. 80–89.

François Modave, Martine Ceberio, and Vladik Kreinovich, “Choquet Integrals and OWA Criteria as a Natural (and Optimal) Next Step After Linear Aggregation: A New General Justification”, In: Alexander Gelbukh and Eduardo F. Morales (eds.), *Proceedings of the 7th Mexican International Conference on Artificial Intelligence MICAI’08*, Mexico City, Mexico, October 27–31, 2008, Springer Lecture Notes on Artificial Intelligence, 2008, Vol. 5317, pp. 741–753.

Paulo Pinheiro da Silva, Nicholas Del Rio, Vladik Kreinovich, and Alejandro Castaneda, “TrustMap: Towards Trust Recommendations for Maps”, *Proceedings of the Terra Cognita 2008 Workshop*, Karlsruhe, Germany, October 26, 2008.

Paulo Pinheiro da Silva, Vladik Kreinovich and Christian Servin, “Maximum Entropy in Support of Semantically Annotated Datasets”, *Proceedings of the 4th International Workshop on Uncertainty Reasoning for the Semantic Web URSW’2008*, Karlsruhe, Germany, October 26, 2008.

Sa-aat Niwitpong, Hung T. Nguyen, Ingo Neumann, and Vladik Kreinovich, “Hypothesis Testing with Interval Data: Case of Regulatory Constraints”, *Proceedings of the 9th International Conference on Intelligent Technologies InTech’08*, Samui, Thailand, October 7–9, 2008, pp. 11–20.

Hung T. Nguyen and Vladik Kreinovich, “Computing Degrees of Subsethood and Similarity for Interval-Valued Fuzzy Sets: Fast Algorithms”, *Proceedings of the 9th*

International Conference on Intelligent Technologies InTech'08, Samui, Thailand, October 7–9, 2008, pp. 47–55.

Ruey L. Cheu, Gang Xiang, and Vladik Kreinovich, “Towards an optimal algorithm for computing fixed points: dynamical systems approach, with applications to transportation engineering”, *Proceedings of the Sixth EUROMECH Nonlinear Dynamics Conference ECON'08*, St. Petersburg, Russia, June 30 – July 4, 2008.

J. T. Yao, Y. Y. Yao, V. Kreinovich, P. Pinheiro da Silva, S. A. Starks, G. Xiang, and H. T. Nguyen, “Towards More Adequate Representation of Uncertainty: From Intervals to Set Intervals, with the Possible Addition of Probabilities and Certainty Degrees”, *Proceedings of the IEEE World Congress on Computational Intelligence WCCI'2008*, Hong Kong, China, June 1–6, 2008, pp. 983–990.

Vladik Kreinovich, Ladislav J. Kohout, and Eunjin Kim, “Square Root of ‘Not’: A Major Difference Between Fuzzy and Quantum Logics”, *Proceedings of the 27th International Conference of the North American Fuzzy Information Processing Society NAFIPS'2008*, New York, New York, May 19–22, 2008.

Vladik Kreinovich and Gang Xiang, “Towards Fast Algorithms for Processing Type-2 Fuzzy Data: Extending Mendel’s Algorithms From Interval-Valued to a More General Case”, *Proceedings of the 27th International Conference of the North American Fuzzy Information Processing Society NAFIPS'2008*, New York, New York, May 19–22, 2008.

Roberto Araiza, Martine Ceberio, Naga Suman Kanagala, Vladik Kreinovich, and Gang Xiang, “Applications of 1-D Versions of Image Referencing Techniques to Hydrology and to Patient Rehabilitation”, *Proceedings of the 27th International Conference of the North American Fuzzy Information Processing Society NAFIPS'2008*, New York, New York, May 19–22, 2008.

Hung T. Nguyen and Vladik Kreinovich, “Everything Is a Matter of Degree: A New Theoretical Justification of Zadeh’s Principle”, *Proceedings of the 27th International Conference of the North American Fuzzy Information Processing Society NAFIPS'2008*, New York, New York, May 19–22, 2008.

Naga Suman Kanagala, Martine Ceberio, Thompson Sarkodie-Gyan, Vladik Kreinovich, and Roberto Araiza, “Identification of human gait in neuro-rehabilitation: towards efficient algorithms”, In: Homer Nazeran, Michael Goldman, and Richard Schoephoerster, *Biomedical Engineering: Recent Developments*, Medical and Engineering Publishers, 2008, pp. 153–156.

Ruey L. Cheu, Vladik Kreinovich, Francois Modave, Gang Xiang, Tao Li, and Tanja Magoc, “How to Estimate, Take Into Account, and Improve Travel Time Reliability in Transportation Networks”, In: Rafi L. Muhanna and Robert L. Mullen (eds.), *Proceedings of the International Workshop on Reliable Engineering Computing REC'08*, Savannah, Georgia, February 20–22, 2008, pp. 289–332.

Paulo Pinheiro da Silva, Aaron Velasco, Martine Ceberio, Christian Servin, Matthew G. Averill, Nicholas Del Rio, Luc Longpré, and Vladik Kreinovich,

“Propagation and Provenance of Probabilistic and Interval Uncertainty in Cyberinfrastructure-Related Data Processing and Data Fusion”, In: Rafi L. Muhanna and Robert L. Mullen (eds.), *Proceedings of the International Workshop on Reliable Engineering Computing REC’08*, Savannah, Georgia, February 20–22, 2008, pp. 199–234.

Ruey Cheu, Vladik Kreinovich, and Srinivasa R. Manduva, “Traffic Assignment for Risk Averse Drivers in a Stochastic Network”, *Proceedings of the Annual Meeting of the Transportation Research Board of the National Academies TRB’07*, Washington, DC, January 13–17, 2008.

Vladik Kreinovich, “Application-Motivated Combinations of Fuzzy, Interval, and Probability Approaches, with Application to Geoinformatics, Bioinformatics, and Engineering”, *Proceedings of the International Conference on Information Technology InTech’07*, Sydney, Australia, December 12–14, 2007, pp. 11–20.

Gregory B. Lush, Esteban Gamez, and Vladik Kreinovich, “How to Avoid Gerrymandering: A New Algorithmic Solution”, *Proceedings of the International Conference on Information Technology InTech’07*, Sydney, Australia, December 12–14, 2007, pp. 146–151.

Hung T. Nguyen, Vladik Kreinovich, and Elizabeth N. Kamoroff, “Asymmetric Information Measures: How to Extract Knowledge From an Expert So That the Expert’s Effort is Minimal”, *Proceedings of the International Conference on Information Technology InTech’07*, Sydney, Australia, December 12–14, 2007, pp. 136–145.

Salamah Salamah, Ann Q. Gates, Vladik Kreinovich, and Steve Roach, “Verification of automatically generated pattern-based LTL specifications”, *Proceedings of the 10th IEEE High Assurance Systems Engineering Symposium HASE’07*, Dallas, Texas, November 14–16, 2007, pp. 341–348.

Salamah Salamah, Ann Q. Gates, Vladik Kreinovich, and Steve Roach, “Using Patterns and Composite Propositions to Automate the Generation of Complex LTL”, In: K. Namjoshi, T. Yoneda, T. Higashino, and Y. Okamura (Eds.), *Proceedings of the 5th International Symposium on Automated Technology for Verification and Analysis ATVA’2007*, Tokyo, Japan, October 22–25, 2007, Springer Lecture Notes in Computer Science, 2007, Vol. 4762, pp. 533–542.

Luc Longpré, Gang Xiang, Vladik Kreinovich, and Eric Freudenthal, “Interval Approach to Preserving Privacy in Statistical Databases: Related Challenges and Algorithms of Computational Statistics”, In: V. Gorodetsky, I. Kottenko, and V. A. Skormin (eds.), *Proceedings of the International Conference “Mathematical Methods, Models and Architectures for Computer Networks Security” MMM-ACNS-07*, St. Petersburg, Russia, September 13–15, 2007, Springer Lecture Notes in Computer Science, 2007, Vol. CCIS-1, pp. 346–361.

Van Nam Huynh, Vladik Kreinovich, Yoshiteru Nakamori, and Hung T. Nguyen, “Towards Efficient Prediction of Decisions under Interval Uncertainty”, In: Roman Wyrzykowski, Jack Gondarra, Konrad Karczewski, and Jerzy Wasniewski (eds.),

Parallel Processing and Applied Mathematics, Proceedings of the Seventh International Conference on Parallel Processing and Applied Mathematics PPAM'2007, Gdansk, Poland, September 9–12, 2007, Springer Lecture Notes in Computer Science, 2008, Vol. 4967, pp. 1372–1381.

Salamah Salamah, Vladik Kreinovich, and Ann Q. Gates, “Generating Linear Temporal Logic Formulas for Pattern-Based Specifications”, *Proceedings of the Nineteenth International Conference on Software Engineering and Knowledge Engineering SEKE'07*, Boston, Massachusetts, July 9–11, 2007, pp. 422–427.

Gilbert Ornelas and Vladik Kreinovich, “Set-Valued Extensions of Fuzzy Logic: Classification Theorems”, In: Marek Reformat and Michael R. Berthold (eds.), *Proceedings of the 26th International Conference of the North American Fuzzy Information Processing Society NAFIPS'2007*, San Diego, California, June 24–27, 2007, pp. 549–553.

Olga Kosheleva, Günter Mayer, and Vladik Kreinovich, “Towards a General Description of Interval Multiplication: Algebraic Analysis and Its Relation to t-Norms”, In: Marek Reformat and Michael R. Berthold (eds.), *Proceedings of the 26th International Conference of the North American Fuzzy Information Processing Society NAFIPS'2007*, San Diego, California, June 24–27, 2007, pp. 543–548.

Gang Xiang, Vladik Kreinovich, and Scott Ferson, “Fitting a Normal Distribution to Interval and Fuzzy Data”, In: Marek Reformat and Michael R. Berthold (eds.), *Proceedings of the 26th International Conference of the North American Fuzzy Information Processing Society NAFIPS'2007*, San Diego, California, June 24–27, 2007, pp. 560–565.

Scott A. Starks, Luc Longpré, Roberto Araiza, Vladik Kreinovich, and Hung T. Nguyen, In: Marek Reformat and Michael R. Berthold (eds.), “Detecting Duplicates in Geoinformatics: from Intervals and Fuzzy Numbers to General Multi-D Uncertainty”, *Proceedings of the 26th International Conference of the North American Fuzzy Information Processing Society NAFIPS'2007*, San Diego, California, June 24–27, 2007, pp. 554–559.

Gang Xiang and Vladik Kreinovich, “Estimating Variance under Interval and Fuzzy Uncertainty: Case of Hierarchical Estimation”, In: Patricia Melin, Oscar Castillo, Luis T. Aguilar, Janusz Kacprzyk, and Witold Pedrycz (eds.), *Foundations of Fuzzy Logic and Soft Computing*, Proceedings of the World Congress of the International Fuzzy Systems Association IFSA'2007, Cancun, Mexico, June 18–21, 2007, Springer Lecture Notes on Artificial Intelligence, 2007, Vol. 4529, pp. 3–12.

Martine Ceberio, Vladik Kreinovich, Andrzej Pownuk, and Barnabás Bede, “From Interval Computations to Constraint-Related Set Computations: Towards Faster Estimation of Statistics and ODEs under Interval, p-Box, and Fuzzy Uncertainty”, In: Patricia Melin, Oscar Castillo, Luis T. Aguilar, Janusz Kacprzyk, and Witold Pedrycz (eds.), *Foundations of Fuzzy Logic and Soft Computing*, Proceedings of the World Congress of the International Fuzzy Systems Association IFSA'2007, Cancun, Mexico, June 18–21, 2007, Springer Lecture Notes on Artificial Intelligence, 2007, Vol. 4529, pp. 33–42.

Vladik Kreinovich, “Why Intervals? Why Fuzzy Numbers? Towards a New Justification”, *Proceedings of the IEEE Conference on Foundations of Computational Intelligence FOCI’07*, Honolulu, Hawaii, April 1–5, 2007, pp. 113–119.

Hung T. Nguyen and Vladik Kreinovich, “Fuzzy Aggregation Techniques in Situations Without Experts: Towards A New Justification”, *Proceedings of the IEEE Conference on Foundations of Computational Intelligence FOCI’07*, Honolulu, Hawaii, April 1–5, 2007, pp. 440–446.

Gang Xiang and Vladik Kreinovich, “Fast Algorithms for Computing Statistics Under Interval and Fuzzy Uncertainty, and Their Applications”, *Proceedings of the International Conference on Fuzzy Mathematics and Its Applications*, Ahmednagar, Maharashtra, India, January 27–29, 2007.

Martine Ceberio, Gang Xiang, Luc Longpré, Vladik Kreinovich, Hung T. Nguyen, Daniel Berleant, “Two Etudes on Combining Probabilistic and Interval Uncertainty: Processing Correlations and Measuring Loss of Privacy”, *Proceedings of the 7th International Conference on Intelligent Technologies InTech’06*, Taipei, Taiwan, December 13–15, 2006, pp. 8–17.

Vladik Kreinovich, Ann Gates, and Olga Kosheleva, “Helping Students to Become Researchers: What We Can Gain from Russian Experience”, *Proceedings of the 36th ASEE/IEEE Frontiers in Education Conference FIE’2006*, San Diego, California, October 28–31, 2006, pp. M3G-26 – M3G-31.

Olga Kosheleva, Vladik Kreinovich, Luc Longpré, Mourat Tchoshanov, and Gang Xiang, “Towards Interval Techniques for Processing Educational Data”, *IEEE Proceedings of the 12th GAMM-IMACS International Symposium on Scientific Computing, Computer Arithmetic and Validated Numerics*, Duisburg, Germany, September 26–29, 2006.

Martine Ceberio, Vladik Kreinovich, Gang Xiang, Scott Ferson, and Cliff Joslyn, “Adding Constraints to Situations When, In Addition to Intervals, We Also Have Partial Information about Probabilities”, *IEEE Proceedings of the 12th GAMM-IMACS International Symposium on Scientific Computing, Computer Arithmetic and Validated Numerics*, Duisburg, Germany, September 26–29, 2006.

V. Kreinovich, S. A. Starks, A. A. Velasco, M. G. Averill, R. Araiza, G. Xiang, and G. R. Keller, “Towards Combining Probabilistic, Interval, Fuzzy Uncertainty, and Constraints: An Example Using the Inverse Problem in Geophysics”, *IEEE Proceedings of the 12th GAMM-IMACS International Symposium on Scientific Computing, Computer Arithmetic and Validated Numerics*, Duisburg, Germany, September 26–29, 2006.

Wei-Shen Wang, Vladik Kreinovich, and Michael Orshansky, “Static Timing Analysis Based on Partial Probabilistic Description of Delay Uncertainty”, *Proceedings of the 43rd Design Automation Conference*, San Francisco, California, July 24–28, 2006, pp. 161–166.

Evgeny Dantsin, Alexander Wolpert, Martine Ceberio, Gang Xiang, and Vladik Kreinovich, “Detecting Outliers under Interval Uncertainty: A New Algorithm

Based on Constraint Satisfaction”, *Proceedings of the International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems IPMU’06*, Paris, France, July 2–7, 2006, pp. 802–809.

G. Randy Keller, Scott A. Starks, Aaron Velasco, Matthew Averill, Roberto Araiza, Gang Xiang, and Vladik Kreinovich, “Towards combining probabilistic, interval, fuzzy uncertainty, and constraints: on the example of inverse problem in geophysics”, *Proceedings of the Second International Conference on Fuzzy Sets and Soft Computing in Economics and Finance FSSCEF’2006*, St. Petersburg, Russia, June 28–July 1, 2006, pp. 47–54.

Carlos Ferregut, Jan Beck, Araceli Sanchez, and Vladik Kreinovich, “Economics of Engineering Design under Interval (and Fuzzy) Uncertainty: Case Study of Building Design”, *Proceedings of the Second International Conference on Fuzzy Sets and Soft Computing in Economics and Finance FSSCEF’2006*, St. Petersburg, Russia, June 28–July 1, 2006, pp. 39–46.

Janos Hajagos and Vladik Kreinovich, “Growth rates under interval uncertainty”, *Proceedings of the Second International Conference on Fuzzy Sets and Soft Computing in Economics and Finance FSSCEF’2006*, St. Petersburg, Russia, June 28–July 1, 2006, pp. 31–38.

Richard Aló, François Modave, Vladik Kreinovich, David Herrera, and Xiaojing Wang, “Bilinear Models from System Approach Justified for Classification, with Potential Applications to Bioinformatics”, *Proceedings of the Second International Conference on Fuzzy Sets and Soft Computing in Economics and Finance FSSCEF’2006*, St. Petersburg, Russia, June 28–July 1, 2006, pp. 55–62.

Vinod Chirayath, Luc Longpré, and Vladik Kreinovich, “Measuring privacy loss in statistical databases”, In: H. Leung and G. Pighizzini (Eds.), *Proceedings of the Workshop on Descriptive Complexity of Formal Systems DCFS 2006*, Las Cruces, New Mexico, June 21–23, 2006, pp. 16–25.

Jerry M. Mendel, Hongwei Wu, Vladik Kreinovich, and Gang Xiang, “Fast Computation of Centroids for Constant-Width Interval-Valued Fuzzy Sets”, *Proceedings of the 25th International Conference of the North American Fuzzy Information Processing Society NAFIPS’2006*, Montreal, Quebec, Canada, June 3–6, 2006, pp. 621–626.

Cesar J. Carrasco and Vladik Kreinovich, “Optimized Sampling Frequencies for Weld Reliability Assessments of Long Pipeline Segments”, *Proceedings of the 25th International Conference of the North American Fuzzy Information Processing Society NAFIPS’2006*, Montreal, Quebec, Canada, June 3–6, 2006, pp. 605–610.

Evgeny Dantsin, Alexander Wolpert, and Vladik Kreinovich, “Quantum Versions of k-CSP Algorithms: a First Step Towards Quantum Algorithms for Interval-Related Constraint Satisfaction Problems”, *Proceedings of the ACM Symposium on Applied Computing SAC’06*, Dijon, France, April 23–27, 2006, pp. 1640–1644.

Ann Gates, Vladik Kreinovich, Luc Longpré, Paolo Pinheiro da Silva, and G. Randy Keller, “Towards Secure Cyberinfrastructure for Sharing Border Informa-

tion”, *Proceedings of the Lineae Terrarum: International Border Conference*, El Paso, Las Cruces, and Cd. Juárez, March 27–30, 2006.

Vladik Kreinovich, Ann Gates, and Olga Kosheleva, “Helping Students to Become Researchers: What We Can Gain from Russian Experience”, *Proceedings of the 2006 International Sun Conference on Teaching and Learning*, El Paso, Texas, March 3–4, 2006.

Rafi Muhanna, Vladik Kreinovich, Pavel Šolín, Jack Chessa, Roberto Araiza, and Gang Xiang, “Interval Finite Element Methods: New Directions”, *Proceedings of the Second International Workshop on Reliable Engineering Computing*, Savannah, Georgia, February 22–24, 2006, pp. 229–243.

Scott Ferson and Vladik Kreinovich, “Modeling Correlation and Dependence Among Intervals”, *Proceedings of the Second International Workshop on Reliable Engineering Computing*, Savannah, Georgia, February 22–24, 2006, pp. 115–126.

Michael Orshansky, Wei-Shen Wang, Gang Xiang, and Vladik Kreinovich, “Interval-Based Robust Statistical Techniques for Non-Negative Convex Functions, with Application to Timing Analysis of Computer Chips”, *Proceedings of the Second International Workshop on Reliable Engineering Computing*, Savannah, Georgia, February 22–24, 2006, pp. 197–212.

Martine Ceberio, Scott Ferson, Vladik Kreinovich, Sanjeev Chopra, Gang Xiang, Adrian Murguia, and Jorge Santillan, “How to take into account dependence between the inputs: from interval computations to constraint-related set computations, with potential applications to nuclear safety, bio- and geosciences”, *Proceedings of the Second International Workshop on Reliable Engineering Computing*, Savannah, Georgia, February 22–24, 2006, pp. 127–154.

Hung T. Nguyen, Olga Kosheleva, and Vladik Kreinovich, “Decision Making Beyond Arrow’s ‘Impossibility Theorem’, With the Analysis of Effects of Collusion and Mutual Attraction”, *Proceedings of the Sixth International Conference on Intelligent Technologies InTech’05*, Phuket Island, Thailand, December 14–16, 2005, pp. 43–52.

Vladik Kreinovich, Daniel J. Berleant, Scott Ferson, and Weldon A. Lodwick, “Combining Interval and Probabilistic Uncertainty: Foundations, Algorithms, Challenges – An Overview” *Proceedings of the International Conference on Fuzzy Systems, Neural Networks, and Genetic Algorithms FNG’05*, Tijuana, Mexico, October 13–14, 2005, pp. 1–10.

René Alt, Jean-Luc Lamotte, and Vladik Kreinovich, “Random Interval Arithmetic is Closer to Common Sense: An Observation”, *Proceedings of the 17th World Congress of the International Association for Mathematics and Computers in Simulation IMACS’2005*, Paris, France, July 11–15, 2005.

Martine Ceberio, Vladik Kreinovich, Sanjeev Chopra, and Bertram Ludäscher, “Taylor Model-Type Techniques for Handling Uncertainty in Expert Systems, with Potential Applications to Geoinformatics”, *Proceedings of the 17th World Congress*

of the International Association for Mathematics and Computers in Simulation IMACS'2005, Paris, France, July 11–15, 2005.

Martine Ceberio and Vladik Kreinovich, “Towards an Optimal Approach to Soft Constraint Problems”, *Proceedings of the 17th World Congress of the International Association for Mathematics and Computers in Simulation IMACS'2005*, Paris, France, July 11–15, 2005.

Andrei M. Finkelstein, Olga Kosheleva, Vladik Kreinovich, Scott A. Starks, and Hung T. Nguyen, “Use of Maxitive (Possibility) Measures in Foundations of Physics and Description of Randomness: Case Study”, *Proceedings of the 24th International Conference of the North American Fuzzy Information Processing Society NAFIPS'2005*, Ann Arbor, Michigan, June 22–25, 2005, pp. 687–692.

Scott A. Starks and Vladik Kreinovich, “From Fuzzification and Intervalization to Anglification: A New 5D Geometric Formalism for Physics and Data Processing”, *Proceedings of the 24th International Conference of the North American Fuzzy Information Processing Society NAFIPS'2005*, Ann Arbor, Michigan, June 22–25, 2005, pp. 401–406.

Vladik Kreinovich, Gang Xiang, and Scott Ferson, “How the Concept of Information as Average Number of ‘Yes-No’ Questions (Bits) Can Be Extended to Intervals, P-Boxes, and more General Uncertainty”, *Proceedings of the 24th International Conference of the North American Fuzzy Information Processing Society NAFIPS'2005*, Ann Arbor, Michigan, June 22–25, 2005, pp. 80–85.

Matthew G. Averill, Gang Xiang, Vladik Kreinovich, G. Randy Keller, Scott A. Starks, Patrick S. Debroux, and James Boehm, “How to Reconstruct the Original Shape of a Radar Signal?”, *Proceedings of the 24th International Conference of the North American Fuzzy Information Processing Society NAFIPS'2005*, Ann Arbor, Michigan, June 22–25, 2005, pp. 717–721.

Matthew G. Averill, Kate C. Miller, G. Randy Keller, Vladik Kreinovich, Roberto Araiza, and Scott A. Starks, “Using Expert Knowledge in Solving the Seismic Inverse Problem”, *Proceedings of the 24th International Conference of the North American Fuzzy Information Processing Society NAFIPS'2005*, Ann Arbor, Michigan, June 22–25, 2005, pp. 310–314.

Emil Platon, Kavitha Tupelly, Vladik Kreinovich, Scott A. Starks, and Karen Villaverde, “Exact Bounds for Interval and Fuzzy Functions Under Monotonicity Constraints, with Potential Applications to Biostratigraphy”, *Proceedings of the 2005 IEEE International Conference on Fuzzy Systems FUZZ-IEEE'2005*, Reno, Nevada, May 22–25, 2005, pp. 891–896.

Andrei M. Finkelstein, Olga Kosheleva, Vladik Kreinovich, Scott A. Starks, and Hung T. Nguyen, “To Properly Reflect Physicists’ Reasoning about Randomness, We Also Need a Maxitive (Possibility) Measure”, *Proceedings of the 2005 IEEE International Conference on Fuzzy Systems FUZZ-IEEE'2005*, Reno, Nevada, May 22–25, 2005, pp. 1044–1049.

Valery Mazin and Vladik Kreinovich, “A Universal Sensor Model”, *Proceedings of the 12th International Conference Sensor’2005*, Nuremberg, Germany, May 10–12, 2005, pp. 317–322.

S. D. Cabrera, K. Iyer, G. Xiang, and V. Kreinovich, “On Inverse Half-toning: Computational Complexity and Interval Computations”, *Proceedings of the 39th Conference on Information Sciences and Systems CISS’2005*, John Hopkins University, March 16–18, 2005, paper 164.

Olga Kosheleva, Vladik Kreinovich, Günter Mayer, and Hung T. Nguyen, “Computing the Cube of an Interval Matrix Is NP-Hard”, *Proceedings of the 20th ACM Symposium on Applied Computing SAC’2005*, Santa Fe, New Mexico, March 13–17, 2005, pp. 1449–1453.

Richard Aló, Vladik Kreinovich, and Scott A. Starks, “Testing Hypotheses on Simulated Data: Why Traditional Hypotheses-Testing Statistics Are Not Always Adequate for Simulated Data, and How to Modify Them”, *Proceedings of the Fifth International Conference on Intelligent Technologies InTech’04*, Houston, Texas, December 2–4, 2004.

Pattama Jaksurat, Eric Freudenthal, Martine Ceberio, and Vladik Kreinovich, “Probabilistic Approach to Trust: Ideas, Algorithms, and Simulations”, *Proceedings of the Fifth International Conference on Intelligent Technologies InTech’04*, Houston, Texas, December 2–4, 2004.

Anthony P. Salvatore, Amitava Biswas, Vladik Kreinovich, Bertha Manriquez, Michael P. Cannito, and Robert J. Sinard, “Expert System-Type Approach to Voice Disorders: Scheduling Botulinum Toxin Treatment for Adductor Spasmodic Dysphonia”, *Proceedings of the Fifth International Conference on Intelligent Technologies InTech’04*, Houston, Texas, December 2–4, 2004.

Hung T. Nguyen, Vladik Kreinovich, and Gang Xiang, “Foundations of Statistical Processing of Set-Valued Data: Towards Efficient Algorithms”, *Proceedings of the Fifth International Conference on Intelligent Technologies InTech’04*, Houston, Texas, December 2–4, 2004.

M. S. Aguiar, G. P. Dimuro, Antônio C. R. Costa, R. K. S. Silva, F. A. Costa, and V. Kreinovich, “The Multi-Layered Interval Categorizer Tessellation-Based Model”, In: Cirano Iochpe and Gilberto Câmara (eds.), *IFIP WG2.6 Proceedings of the 6th Brazilian Symposium on Geoinformatics Geoinfo’2004*, Campos do Jordão, Brazil, November 22–24, 2004, pp. 437–454. ISBN 3901882200

V. Kreinovich, J. Beck, C. Ferregut, A. Sanchez, G. R. Keller, M. Averill, and S. A. Starks, “Monte-Carlo-type techniques for processing interval uncertainty, and their engineering applications”, *Proceedings of the Workshop on Reliable Engineering Computing*, Savannah, Georgia, September 15–17, 2004, pp. 139–160.

S. A. Starks, V. Kreinovich, L. Longpré, M. Ceberio, G. Xiang, R. Araiza, J. Beck, R. Kandathi, A. Nayak, and R. Torres, “Towards combining probabilistic and interval uncertainty in engineering calculations”, *Proceedings of the Workshop on Reli-*

able Engineering Computing, Savannah, Georgia, September 15–17, 2004, pp. 193–213.

R. Aldouri, G. R. Keller, A. Gates, J. Rasillo, L. Salayandia, V. Kreinovich, J. Seeley, P. Taylor, and S. Holloway, “GEON: Geophysical data add the 3rd dimension in geospatial studies”, *Proceedings of the ESRI International User Conference 2004*, San Diego, California, August 9–13, 2004, Paper 1898.

Scott A. Starks, Soheil Nazarian, Vladik Kreinovich, Joseph Adidhela, and Roberto Araiza, “Using FFT-Based Data Processing Techniques to Characterize Asphaltic Concrete Mixtures”, *Proceedings of the 11th IEEE Digital Signal Processing Workshop DSP’04*, Taos Ski Valley, New Mexico, August 1–4, 2004, pp. 241–245.

P. Debroux, J. Boehm, F. Modave, V. Kreinovich, G. Xiang, J. Beck, K. Tupelly, R. Kandathi, L. Longpré, and K. Villaverde, “Using 1-D radar observations to detect a space explosion core among the explosion fragments: sequential and distributed algorithms”, *Proceedings of the 11th IEEE Digital Signal Processing Workshop DSP’04*, Taos Ski Valley, New Mexico, August 1–4, 2004, pp. 273–277.

Leon Reznik and Vladik Kreinovich, “Fuzzy and Probabilistic Models of Association Information in Sensor Networks”, *Proceedings of the International IEEE Conference on Fuzzy Systems FUZZ-IEEE’2004*, Budapest, Hungary, July 25–29, 2004.

Vladik Kreinovich, Gennady N. Solopchenko, Scott Ferson, Lev Ginzburg, and Richard Aló, “Probabilities, intervals, what next? Extension of interval computations to situations with partial information about probabilities”, *Proceedings of the 10th IMEKO TC7 International Symposium on Advances of Measurement Science*, Saint-Petersburg, Russia, June 30–July 2, 2004, Vol. 1, pp. 137–142.

G. P. Dimuro, A. C. R. Costa, and V. Kreinovich, “Modelling measurement processes as timed information processes in simplex domains”, *Proceedings of the 10th IMEKO TC7 International Symposium on Advances of Measurement Science*, Saint-Petersburg, Russia, June 30–July 2, 2004, Vol. 1, pp. 71–76.

Hung T. Nguyen, Vladik Kreinovich, Chitta Baral, and Valery D. Mazin, “Group-Theoretic Approach as a General Framework for Sensors, Neural Networks, Fuzzy Control, and Genetic Boolean Networks”, *Proceedings of the 10th IMEKO TC7 International Symposium on Advances of Measurement Science*, St. Petersburg, Russia, June 30–July 2, 2004, Vol. 1, pp. 65–70.

Roberto Osegueda, G. Randy Keller, Scott A. Starks, Roberto Araiza, Dmitry Bizyaev, and Vladik Kreinovich, “Towards a General Methodology for Designing Sub-Noise Measurement Procedures”, *Proceedings of the 10th IMEKO TC7 International Symposium on Advances of Measurement Science*, St. Petersburg, Russia, June 30–July 2, 2004, Vol. 1, pp. 59–64.

Vladik Kreinovich and Isaak A. Kunin, “Application of Kolmogorov Complexity to Advanced Problems in Mechanics”, *Proceedings of the Advanced Problems in Mechanics Conference APM’04*, St. Petersburg, Russia, June 24–July 1, 2004, pp. 241–245.

Luke Achenie, Vladik Kreinovich, and Kaj Madsen, “Interval Methods: An Introduction”, In: Jack Dongarra, Kaj Madsen, and Jerzy Wasniewski (eds.), *PARA '04 Workshop on State-of-the-Art in Scientific Computing*, Springer Lecture Notes in Computer Science, 2005, Vol. 3732, pp. 53–56.

Gang Xiang, Scott A. Starks, Vladik Kreinovich, and Luc Longpré, “New Algorithms for Statistical Analysis of Interval Data”, *Proceedings of the Workshop on State-of-the-Art in Scientific Computing PARA '04*, Lyngby, Denmark, June 20–23, 2004, Vol. 1, pp. 123–129. extended version in Jack Dongarra, Kaj Madsen, and Jerzy Wasniewski (eds.), *PARA '04 Workshop on State-of-the-Art in Scientific Computing*, Springer Lecture Notes in Computer Science, 2005, Vol. 3732, pp. 189–196.

Martine Ceberio, Vladik Kreinovich, and Lev Ginzburg, “Towards Joint Use of Probabilities and Intervals in Scientific Computing: What is the Best Transition from Linear to Quadratic Approximation?”, *Proceedings of the Workshop on State-of-the-Art in Scientific Computing PARA '04*, Lyngby, Denmark, June 20–23, 2004, Vol. 1, pp. 43–49. extended version: Martine Ceberio, Vladik Kreinovich, and Lev Ginzburg, “On the Use of Intervals in Scientific Computing: What is the Best Transition from Linear to Quadratic Approximation?”, in Jack Dongarra, Kaj Madsen, and Jerzy Wasniewski (eds.), *PARA '04 Workshop on State-of-the-Art in Scientific Computing*, Springer Lecture Notes in Computer Science, 2005, Vol. 3732, pp. 75–82.

M. S. Aguiar, G. P. Dimuro, Antônio C. R. Costa, R. K. S. Silva, and V. Kreinovich, “HPC-ICTM: the interval categorizer tessellation-based model for high performance computing”, *Proceedings of the Workshop on State-of-the-Art in Scientific Computing PARA '04*, Lyngby, Denmark, June 20–23, 2004. extended version in Jack Dongarra, Kaj Madsen, and Jerzy Wasniewski (eds.), *PARA '04 Workshop on State-of-the-Art in Scientific Computing*, Springer Lecture Notes in Computer Science, 2005, Vol. 3732, pp. 83–92.

Vladik Kreinovich, “Toward Formalizing Non-Monotonic Reasoning in Physics: the Use of Kolmogorov Complexity and Algorithmic Information Theory to Formalize the Notions ‘Typically’ and ‘Normally’ ”, In: Leonid Sheremetov and Matias Alvarado (eds.), *Proceedings of the Workshops on Intelligent Computing WIC'04 associated with the Mexican International Conference on Artificial Intelligence MICAI'04*, Mexico City, Mexico, April 26–27, 2004, pp. 187–194.

Jose Rodrigo Mares, Roberto Osegueda, Nagaswaroopu Kaukuri, and Vladik Kreinovich, “Geometric approach to detecting and locating cracks in thin plates by Lamb wave reflection: case of moving transducer”, In: Tribikram Kundu (ed.), *Health Monitoring and Smart Nondestructive Evaluation of Structural and Biological Systems III*, Proceedings of the SPIE/International Society for Optical Engineering, Vol. 5394, San Diego, CA, March 14–18, 2004, pp. 385–398.

Vladik Kreinovich, Hung T. Nguyen, Graçaliz Pereira Dimuro, Antônio Carlos da Rocha Costa, and Benjamin Rene Callejas Bedregal, “A New Differential Formalism for Interval-Valued Functions and Its Potential Use in Detecting 1-D Landscape

Features”, *Proceedings of the International Conference on Information Technology InTech’03*, Chiang Mai, Thailand, December 17–19, 2003, pp. 491–498.

Berlin Wu, Hung T. Nguyen, and Vladik Kreinovich, “Real-Time Algorithms for Statistical Analysis of Interval Data”, *Proceedings of the International Conference on Information Technology InTech’03*, Chiang Mai, Thailand, December 17–19, 2003, pp. 483–490.

Chin-Wang Tao, Hung T. Nguyen, J. T. Yao, and Vladik Kreinovich, “Sensitivity Analysis of Neural Control”, *Proceedings of the International Conference on Information Technology InTech’03*, Chiang Mai, Thailand, December 17–19, 2003, pp. 478–482.

Vladik Kreinovich and Luc Longpré, “Computational complexity and feasibility of data processing and interval computations, with extension to cases when we have partial information about probabilities”, In: Vasco Brattka, Matthias Schröder, Klaus Weihrauch, and Ning Zhong, *Proceedings of the Conference on Computability and Complexity in Analysis CCA’2003*, Cincinnati, Ohio, USA, August 28–30, 2003, pp. 19–54.

Vladik Kreinovich and Isaak A. Kunin, “Kolmogorov Complexity: How a Paradigm Motivated by Foundations of Physics Can Be Applied in Robust Control”, In: A. L. Fradkov and A. N. Churilov (eds.), *Proceedings of the International Conference “Physics and Control” PhysCon’2003*, Saint-Petersburg, Russia, August 20–22, 2003, pp. 88–93.

Fariba Ansari, William Durrer, Soheil Nazarian, and Vladik Kreinovich, “Determination of Properties of Composite Materials from the Lamb Wave Propagation: Probabilistic, Interval, and Fuzzy Approaches”, *Proceedings of the 22nd International Conference of the North American Fuzzy Information Processing Society NAFIPS’2003*, Chicago, Illinois, July 24–26, 2003, pp. 420–425.

Cynthia Campos, G. Randy Keller, Vladik Kreinovich, Luc Longpré, Francois Modave, Scott A. Starks, and Roberto Torres, “The Use of Fuzzy Measures as a Data Fusion Tool in Geographic Information Systems: Case Study”, *Proceedings of the 22nd International Conference of the North American Fuzzy Information Processing Society NAFIPS’2003*, Chicago, Illinois, July 24–26, 2003, pp. 365–370.

Carlos de la Mora, Piotr Wojciechowski, Vladik Kreinovich, Scott A. Starks, Paul Tanenbaum, and Alexander Kuzminykh, “Robust Methodology for Characterizing System Response to Damage: A Subjective (Fuzzy) Partial Ordered Modification of the Traditional Utility-Probability Scheme”, *Proceedings of the 22nd International Conference of the North American Fuzzy Information Processing Society NAFIPS’2003*, Chicago, Illinois, July 24–26, 2003, pp. 413–419.

Mark Martinez, Luc Longpré, Vladik Kreinovich, Scott A. Starks, and Hung T. Nguyen, “Fast Quantum Algorithms for Handling Probabilistic, Interval, and Fuzzy Uncertainty”, *Proceedings of the 22nd International Conference of the North American Fuzzy Information Processing Society NAFIPS’2003*, Chicago, Illinois, July 24–26, 2003, pp. 395–400.

Vladik Kreinovich, Praveen Patangay, Luc Longpré, Scott A. Starks, Cynthia Campos, Scott Ferson, and Lev Ginzburg, “Outlier Detection Under Interval and Fuzzy Uncertainty: Algorithmic Solvability and Computational Complexity”, *Proceedings of the 22nd International Conference of the North American Fuzzy Information Processing Society NAFIPS’2003*, Chicago, Illinois, July 24–26, 2003, pp. 401–406.

Paul J. Tanenbaum, Carlos de la Mora, Piotr Wojciechowski, Olga Kosheleva, Vladik Kreinovich, Scott A. Starks, and Alexandr Kuzminykh, “Robust Methodology for Characterizing System Response to Damage: Approach Based on Partial Order”, In: Ivan Lirkov, Svetozar Margenov, Jerzy Waśniewski, and Plamen Yalamov (eds.), *Large-Scale Scientific Computing*, Proceedings of the 4-th International Conference LSSc’2003, Sozopol, Bulgaria, June 4–8, 2003, Springer Lecture Notes in Computer Science, 2004, Vol. 2907, pp. 276–283.

Vladik Kreinovich, Luc Longpré, Praveen Patangay, Scott Ferson, and Lev Ginzburg, “Outlier Detection Under Interval Uncertainty: Algorithmic Solvability and Computational Complexity”, In: Ivan Lirkov, Svetozar Margenov, Jerzy Waśniewski, and Plamen Yalamov (eds.), *Large-Scale Scientific Computing*, Proceedings of the 4-th International Conference LSSc’2003, Sozopol, Bulgaria, June 4–8, 2003, Springer Lecture Notes in Computer Science, 2004, Vol. 2907, pp. 238–245.

Hung T. Nguyen, Vladik Kreinovich, and Luc Longpré, “Dirty Pages of Logarithm Tables, Lifetime of the Universe, and Subjective (Fuzzy) Probabilities on Finite and Infinite Intervals”, *Proceedings of the IEEE International Conference on Fuzzy Systems FUZZ-IEEE’2003*, St. Louis, Missouri, May 25–28, 2003, pp. 67–73.

Leon Reznik, Vladik Kreinovich and Scott A. Starks, “Use of Fuzzy Expert’s Information in Measurement and What We Can Gain from Its Application in Geophysics”, *Proceedings of the IEEE International Conference on Fuzzy Systems FUZZ-IEEE’2003*, St. Louis, Missouri, May 25–28, 2003, pp. 1026–1031.

Roberto Osegueda, Vladik Kreinovich, Soheil Nazarian and Enrique Roldan, “Detection of cracks at rivet holes in thin plates using Lamb-wave scanning”, In: Tribikram Kundu (ed.), *Smart Nondestructive Evaluation and Health Monitoring of Structural and Biological Systems II*, Proceedings of the SPIE/International Society for Optical Engineering, Vol. 5047, San Diego, CA, March 3–5, 2003, pp. 55–66.

Roberto A. Osegueda, Seetharami R. Seelam, Bharat Mulupuru, and Vladik Kreinovich, “Statistical and Dempster-Shafer Techniques in Testing Structural Integrity of Aerospace Structures”, In: Tribikram Kundu (ed.), *Smart Nondestructive Evaluation and Health Monitoring of Structural and Biological Systems II*, Proceedings of the SPIE/International Society for Optical Engineering, Vol. 5047, San Diego, CA, March 3–5, 2003, pp. 140–151.

Hung T. Nguyen, Tonghui Wang, and Vladik Kreinovich, “Towards Foundations of Processing Imprecise Data: From Traditional Statistical Techniques of Processing Crisp Data to Statistical Processing of Fuzzy Data”, In: Yingming Liu, Guoqing Chen, Mingsheng Ying and Kai-Yuan Cai (eds.), *Proceedings of the International*

Conference on Fuzzy Information Processing: Theories and Applications FIP'2003, Beijing, China, March 1–4, 2003, Vol. II, pp. 895–900.

Laurent Granvilliers, Vladik Kreinovich, and Norbert Müller, “Novel Approaches to Numerical Software with Result Verification”, In: René Alt, Andreas Frommer, R. Baker Kearfott, and Wolfram Luther (eds.), *Numerical Software with Result Verification*, International Dagstuhl Seminar, Dagstuhl Castle, Germany, January 19–24, 2003, Revised Papers, Springer Lectures Notes in Computer Science, 2004, Vol. 2991, pp. 274–305.

François Modave and Vladik Kreinovich, “Fuzzy Measures and Integrals as Aggregation Operators: Solving the Commensurability Problem”, *Proceedings of the 21st International Conference of the North American Fuzzy Information Processing Society NAFIPS'2002*, New Orleans, Louisiana, June 27–29, 2002, pp. 292–297.

Ronald R. Yager and Vladik Kreinovich, “Main Ideas Behind OWA Lead to a Universal and Optimal Approximation Scheme”, *Proceedings of the 21st International Conference of the North American Fuzzy Information Processing Society NAFIPS'2002*, New Orleans, Louisiana, June 27–29, 2002, pp. 428–433.

I. B. Türkşen, A. Esper, K. Patel, S. A. Starks, and V. Kreinovich, “Selecting a Fuzzy Logic Operation from the DNF-CNF Interval: How Practical Are the Resulting Operations?”, *Proceedings of the 21st International Conference of the North American Fuzzy Information Processing Society NAFIPS'2002*, New Orleans, Louisiana, June 27–29, 2002, pp. 28–33.

Vladik Kreinovich, Hung T. Nguyen, Scott Ferson, and Lev Ginzburg, “From Computation with Guaranteed Intervals to Computation with Confidence Intervals: A New Application of Fuzzy Techniques”, *Proceedings of the 21st International Conference of the North American Fuzzy Information Processing Society NAFIPS'2002*, New Orleans, Louisiana, June 27–29, 2002, pp. 418–422.

Dima Iourinski, Scott A. Starks, Vladik Kreinovich, and Stephen F. Smith, “Swarm intelligence: theoretical proof that empirical techniques are optimal”, *Proceedings of the 2002 World Automation Congress WAC'2002*, Orlando, Florida, June 9–13, 2002, pp. 107–112.

Vladik Kreinovich, Scott A. Starks, Olga Kosheleva, and Andrei Finkelstein, “Open-ended configurations of radio telescopes: towards optimal design”, *Proceedings of the 2002 World Automation Congress WAC'2002*, Orlando, Florida, June 9–13, 2002, pp. 101–106.

Vladik Kreinovich, Luc Longpré, and James J. Buckley, “Are There Efficient Necessary and Sufficient Conditions for Straightforward Interval Computations To Be Exact?”, *Extended Abstracts of the 2002 SIAM Workshop on Validated Computing*, Toronto, Canada, May 23–25, 2002, pp. 94–96.

Scott Ferson, Lev Ginzburg, Vladik Kreinovich, and Jorge Lopez, “Absolute Bounds on the Mean of Sum, Product, etc.: A Probabilistic Extension of Interval Arithmetic”, *Extended Abstracts of the 2002 SIAM Workshop on Validated Computing*, Toronto, Canada, May 23–25, 2002, pp. 70–72.

Scott Ferson, Lev Ginzburg, Vladik Kreinovich, and Monica Aviles, “Exact Bounds on Sample Variance of Interval Data”, *Extended Abstracts of the 2002 SIAM Workshop on Validated Computing*, Toronto, Canada, May 23–25, 2002, pp. 67–69.

Roberto Osegueda and Vladik Kreinovich, “Detecting and Locating Small Cracks in Thin Plates by Lamb Wave Reflection: Validated Geometric Approach”, *Extended Abstracts of the 2002 SIAM Workshop on Validated Computing*, Toronto, Canada, May 23–25, 2002, pp. 149–151.

Hung T. Nguyen, Masao Mukaidono, and Vladik Kreinovich, “Probability of Implication, Logical Version of Bayes Theorem, and Fuzzy Logic Operations”, *Proceedings of FUZZ-IEEE’2002*, Honolulu, Hawaii, May 12–17, 2002, Vol. 1, pp. 530–535.

Roberto Osegueda, Vladik Kreinovich, Lakshmi Potluri, and Richard Aló, “Non-Destructive Testing of Aerospace Structures: Granularity and Data Mining Approach”, *Proceedings of FUZZ-IEEE’2002*, Honolulu, Hawaii, May 12–17, 2002, Vol. 1, pp. 685–689.

Scott A. Starks, Soheil Nazarian, Vladik Kreinovich, and Joseph Adidhela, “Use of Satellite Image Referencing Algorithms to Characterize Asphaltic Concrete Mixtures”, *Proceedings of FUZZ-IEEE’2002*, Honolulu, Hawaii, May 12–17, 2002, Vol. 1, pp. 536–540.

Scott Ferson, Lev Ginzburg, Vladik Kreinovich, Hung T. Nguyen, and Scott A. Starks, “Uncertainty in Risk Analysis: Towards a General Second-Order Approach Combining Interval, Probabilistic, and Fuzzy Techniques”, *Proceedings of FUZZ-IEEE’2002*, Honolulu, Hawaii, May 12–17, 2002, Vol. 2, pp. 1342–1347.

Roberto Araiza, Hongjie Xie, Scott A. Starks, and Vladik Kreinovich, “Automatic Referencing of Multi-Spectral Images”, *Proceedings of the IEEE Southwest Symposium on Image Analysis and Interpretation*, Santa Fe, New Mexico, USA, April 7–9, 2002, pp. 21–25.

Olga Kosheleva, Vladik Kreinovich, and Hung T. Nguyen, “On the Optimal Choice of Quality Metric in Image Compression”, *Proceedings of the IEEE Southwest Symposium on Image Analysis and Interpretation*, Santa Fe, New Mexico, USA, April 7–9, 2002, pp. 116–120.

Vladik Kreinovich and Richard Aló, “Optimization Techniques under Uncertain Criteria, and Their Possible Use in Computerized Education”, *Proceedings of the International Workshop on Research and Development of Human Communication Technologies for Conversational Interaction and Learning*, Puebla, Mexico, January 19–20, 2002.

Vladik Kreinovich, Claude Langrand, and Hung T. Nguyen, “Combining Fuzzy and Probabilistic Knowledge Using Belief Functions”, *Proceedings of the Second Vietnam-Japan Bilateral Symposium on Fuzzy Systems and Applications VJ-FUZZY’2001*, Hanoi, Vietnam, December 7–8, 2001, pp. 191–198.

Sompong Dhompongsa, Vladik Kreinovich, and Hung T. Nguyen, “How to Interpret Neural Networks In Terms of Fuzzy Logic?”, *Proceedings of the Sec-*

ond Vietnam-Japan Bilateral Symposium on Fuzzy Systems and Applications VJ-FUZZY'2001, Hanoi, Vietnam, December 7–8, 2001, pp. 184–190.

Pratit Santiprabhob, Hung T. Nguyen, Witold Pedrycz, and Vladik Kreinovich, “Logic-Motivated Choice of Fuzzy Logic Operators”, *Proceedings of The 10th IEEE International Conference on Fuzzy Systems FUZZ-IEEE'2001*, Melbourne, Australia, December 2–5, 2001, Vol. 2, pp. 646–649.

Bernadette Bouchon-Meunier, Hung T. Nguyen, and Vladik Kreinovich, “Discrete (Set) Derivatives and ‘Algebraic’ Fuzzy Logic Operations”, *Proceedings of The 10th IEEE International Conference on Fuzzy Systems FUZZ-IEEE'2001*, Melbourne, Australia, December 2–5, 2001, Vol. 1, pp. 420–423.

Hung T. Nguyen, Vladik Kreinovich, Michael Margaliot, and Gideon Langholtz, “Hyperbolic Approach to Fuzzy Control Is Optimal”, *Proceedings of The 10th IEEE International Conference on Fuzzy Systems FUZZ-IEEE'2001*, Melbourne, Australia, December 2–5, 2001, Vol. 2, pp. 888–891.

Mourad Oussalah, Hung T. Nguyen, and Vladik Kreinovich, “A New Derivation of Centroid Defuzzification”, *Proceedings of The 10th IEEE International Conference on Fuzzy Systems FUZZ-IEEE'2001*, Melbourne, Australia, December 2–5, 2001, Vol. 2, pp. 884–887.

Vladik Kreinovich, Claude Langrand, and Hung T. Nguyen, “A Statistical Analysis for Rule Base Reduction”, *Proceedings of the Second International Conference on Intelligent Technologies InTech'2001*, Bangkok, Thailand, November 27–29, 2001, pp. 47–52.

Sompong Dhompongsa, Vladik Kreinovich, and Hung T. Nguyen, “Interval Mathematics: Algebraic Aspects”, *Proceedings of the Second International Conference on Intelligent Technologies InTech'2001*, Bangkok, Thailand, November 27–29, 2001, pp. 30–38.

Bernadette Bouchon-Meunier, Vladik Kreinovich, and Hung T. Nguyen, “Non-Associative Operations”, *Proceedings of the Second International Conference on Intelligent Technologies InTech'2001*, Bangkok, Thailand, November 27–29, 2001, pp. 39–46.

Vladik Kreinovich, Mirko Navara, and Zdeněk Žabokrtský, “Constrained fuzzy arithmetic”, In: P. Hájek (ed.), *Proceedings of the Workshop on Soft Computing SOFSEM'2001*, Piešťany, Slovakia, November 29–30, 2001, pp. 1–3.

Jesus Martinez, Leopoldo Macias, Ammar Esper, Jesus Chaparro, Vick Alvarado, Scott A. Starks, and Vladik Kreinovich, “Towards more realistic (e.g., non-associative) and- and or-operations in fuzzy logic”, *Proceedings of the 2001 IEEE Systems, Man, and Cybernetics Conference*, Tucson, Arizona, October 7–10, 2001, pp. 2187–2192.

Scott A. Starks, Dima Iourinski, and Vladik Kreinovich, “2-D analogues of Allen interval algebra for image analysis: towards justification”, *Proceedings of the 2001*

IEEE Systems, Man, and Cybernetics Conference, Tucson, Arizona, October 7–10, 2001, pp. 2182–2186.

Sreenath Srikrishnan, Roberto Araiza, Hongjie Xie, Scott A. Starks, and Vladik Kreinovich, “Automatic referencing of satellite and radar images”, *Proceedings of the 2001 IEEE Systems, Man, and Cybernetics Conference*, Tucson, Arizona, October 7–10, 2001, pp. 2176–2180.

Qian Wen, Ann Q. Gates, Jan Beck, Vladik Kreinovich, and G. Randy Keller, “Towards automatic detection of erroneous measurement results in a gravity database”, *Proceedings of the 2001 IEEE Systems, Man, and Cybernetics Conference*, Tucson, Arizona, October 7–10, 2001, pp. 2170–2175.

Nguyen Hoang Phuong, K. P. Adlassnig, Vladik Kreinovich, and Daniel Yeung, “A rule-based expert system for integrated Western and Eastern medicine in diagnosis and treatment using interval computations”, *Proceedings of the 2001 IEEE Systems, Man, and Cybernetics Conference*, Tucson, Arizona, October 7–10, 2001, pp. 3602–3609.

Hung T. Nguyen, Vladik Kreinovich, and Antonio Di Nola, “Which Truth Values in Fuzzy Logics Are Definable?”, *Proceedings of the NEW New Paradigms for the New Millennium Conference*, Caserta, Italy, September 13–15, 2001.

Mourad Oussalah, Hung T. Nguyen, and Vladik Kreinovich, “Reduction to Independent Variables: From Normal Distribution to General Statistical Case to Fuzzy”, *Proceedings of the 2nd Conference of the European Society for Fuzzy Logic and Technology EUSFLAT’01*, Leicester, England, September 5–7, 2001, pp. 402–405.

Hung T. Nguyen, Vladik Kreinovich, and Witold Pedrycz, “Towards Fusing Sophisticated Mathematical Knowledge and Informal Expert Knowledge: An Arbitrary Metric Can Be Naturally Interpreted in Fuzzy Terms”, *Proceedings of the 2nd Conference of the European Society for Fuzzy Logic and Technology EUSFLAT’01*, Leicester, England, September 5–7, 2001, pp. 406–409.

Hung T. Nguyen, Vladik Kreinovich, and Luc Longpré, “Second-Order Uncertainty as a Bridge Between Probabilistic and Fuzzy Approaches”, *Proceedings of the 2nd Conference of the European Society for Fuzzy Logic and Technology EUSFLAT’01*, Leicester, England, September 5–7, 2001, pp. 410–413.

Vladik Kreinovich and Richard Aló, “Interval Mathematics for Analysis of Multiresolutional Systems”, In: E. R. Messina and A. R. Meystel (eds.), *Measuring the Performance and Intelligence of Systems: Proceedings of the 2001 PerMIS Workshop, Mexico City, September 4, 2001*, NIST Publication 982, June 2002, pp. 37–48.

Chitta Baral, Vladik Kreinovich, and Raúl A. Trejo, “Computational Complexity of Planning with Temporal Goals”, *Proceedings of the International Joint Conferences in Artificial Intelligence IJCAI’01*, Seattle, Washington, August 4–10, 2001, pp. 509–514.

Jerry R. Hobbs and Vladik Kreinovich, “Optimal Choice of Granularity In Commonsense Estimation: Why Half-Orders of Magnitude”, *Proceedings of the Joint 9th World Congress of the International Fuzzy Systems Association and 20th International Conference of the North American Fuzzy Information Processing Society IFSA/NAFIPS 2001*, Vancouver, Canada, July 25–28, 2001, pp. 1343–1348.

I. R. Goodman, Raúl A. Trejo, Vladik Kreinovich, Jesus Martinez, and Reginaldo Gonzalez, “An even more realistic (non-associative) interval logic and its relation to psychology of human reasoning”, *Proceedings of the Joint 9th World Congress of the International Fuzzy Systems Association and 20th International Conference of the North American Fuzzy Information Processing Society IFSA/NAFIPS 2001*, Vancouver, Canada, July 25–28, 2001, pp. 1586–1591.

Vladik Kreinovich and Hung T. Nguyen, “1st Order, 2nd Order, What Next? Do We Really Need Third-Order Descriptions: A View From A Realistic (Granular) Viewpoint”, *Proceedings of the Joint 9th World Congress of the International Fuzzy Systems Association and 20th International Conference of the North American Fuzzy Information Processing Society IFSA/NAFIPS 2001*, Vancouver, Canada, July 25–28, 2001, pp. 1908–1913.

Vladik Kreinovich, Hung T. Nguyen, and Witold Pedrycz, “How to Make Sure That “ ≈ 100 ” + 1 Is ≈ 100 in Fuzzy Arithmetic: Solution and Its (Inevitable) Drawbacks”, *Proceedings of the Joint 9th World Congress of the International Fuzzy Systems Association and 20th International Conference of the North American Fuzzy Information Processing Society IFSA/NAFIPS 2001*, Vancouver, Canada, July 25–28, 2001, pp. 1653–1658.

Hung T. Nguyen, Vladik Kreinovich, and I. R. Goodman, “Why Unary and Binary Operations in Logic: General Result Motivated by Interval-Valued Logics”, *Proceedings of the Joint 9th World Congress of the International Fuzzy Systems Association and 20th International Conference of the North American Fuzzy Information Processing Society IFSA/NAFIPS 2001*, Vancouver, Canada, July 25–28, 2001, pp. 1991–1996.

Timothy Ross, Cliff Joslyn, and Vladik Kreinovich, “Accessing the predictive accuracy of complex simulation models”, *Proceedings of the Joint 9th World Congress of the International Fuzzy Systems Association and 20th International Conference of the North American Fuzzy Information Processing Society IFSA/NAFIPS 2001*, Vancouver, Canada, July 25–28, 2001, pp. 2008–2012.

Richard Aló, Raúl Trejo, and Vladik Kreinovich, “Can Computers Do the Job of Nobelist Physicists? Planck Formula Revisited”, *Proc. of the 2001 International Conference on Information Technology for the New Millennium IConIT’2001*, Bangkok, Thailand, May 28–30, 2001, pp. 284–295.

A. Bertoni, Giuly Grossi, Alessandro Provetti, Vladik Kreinovich, and Luis Ng Tari, “The Prospect for Answer Sets Computation by a Genetic Model”, *Proc. of AAAI Symposium on Answer Set Programming: Towards Efficient and Scalable Knowledge Representation and Reasoning*, Stanford, CA, March 26–28, 2001, pp. 1–5.

Hung T. Nguyen, Witold Pedrycz, and Vladik Kreinovich, “On Approximation of Fuzzy Sets by Crisp Sets: From Continuous Control-Oriented Defuzzification To Discrete Decision Making”, *Proc. of International Conference on Intelligent Technologies*, Bangkok, Thailand, December 13–15, 2000, pp. 254–260.

Timothy J. Ross, Berlin Wu, and Vladik Kreinovich, “Optimal Elimination of Inconsistency in Expert Knowledge: Formulation of the Problem, Fast Algorithms”, *Proc. of International Conference on Intelligent Technologies*, Bangkok, Thailand, December 13–15, 2000, pp. 450–458.

Roberto A. Osegueda, Seetharami R. Seelam, Ana C. Holguin, Vladik Kreinovich, and Chin-Wang Tao, “Statistical and Dempster-Shafer Techniques in Testing Structural Integrity of Aerospace Structures”, *Proc. of International Conference on Intelligent Technologies*, Bangkok, Thailand, December 13–15, 2000, pp. 383–389.

Raúl A. Trejo, Joel Galloway, Charanjiv Sachar, Vladik Kreinovich, Chitta Baral, and Le Chi Tuan, “From Planning to Searching for the Shortest Plan: An Optimal Transition”, *Proc. of International Conference on Intelligent Technologies*, Bangkok, Thailand, December 13–15, 2000, pp. 17–23.

Vladik Kreinovich and Chin-Wang Tao, “Checking Identities Is Computationally Intractable (NP-Hard), So Human Provers Will Be Always Needed”, *Proc. of International Conference on Intelligent Technologies*, Bangkok, Thailand, December 13–15, 2000, pp. 24–27.

Hung T. Nguyen, Vladik Kreinovich, and Chin-Wang Tao, “Why 95% and Two Sigma? A Theoretical Justification for an Empirical Measurement Practice”, *Proc. International Workshop on Intelligent Systems Resolutions: The 8th Bellman Continuum*, Taipei, Taiwan, December 11–12, 2000, pp. 358–362.

Hung T. Nguyen, Olga Kosheleva, Vladik Kreinovich, and Liya Ding, “On the Optimal Choice of Quality Metric In Image Compression: A Soft Computing Approach”, *Proceedings of the Sixth International Conference on Control, Automation, Robotics and Vision ICARCV'2000*, Singapore, December 5–8, 2000.

Hongjie Xie, Nigel Hicks, G. Randy Keller, Haitao Huang, and Vladik Kreinovich, “Automatic image registration based on a FFT algorithm and IDL/ENVI”, *Proceedings of the ICORG-2000 International Conference on Remote Sensing and GIS/GPS*, Hyderabad, India, December 1–4, 2000, Vol. 1, pp. 397–402.

Olga Kosheleva, Vladik Kreinovich, and Yeung Yam, “On the optimal choice of quality metric in image compression”, *Proceedings of the International Symposium on Smart Structures and Microsystems (IS3M)*, Hong Kong, October 19–21, 2000, Paper C3-3.

Edward Vidal, Luc Longpré, Vladik Kreinovich, Huang Haitao, and Yeung Yam, “Asymptotically optimal algorithms for weather applications of Smart Dust”, *Proceedings of the International Symposium on Smart Structures and Microsystems (IS3M)*, Hong Kong, October 19–21, 2000, Paper C3-2.

Yeung Yam, Vladik Kreinovich, and Hung T. Nguyen, “Extracting fuzzy sparse rule base by Cartesian representation and clustering”, *Proceedings of the 2000 IEEE Conference on Systems, Man, and Cybernetics SMC’2000*, Nashville, TN, October 8–10, pp. 3778–3783.

Nguyen Hoang Phuong and Vladik Kreinovich, “Fuzzy logic and its applications in medicine”, *Proc. of Asian Pacific Medical Informatics Conference APAMI-MIC’2000*, Hong Kong, September 27–30, 2000, pp. 1-11.

Raúl Trejo, Vladik Kreinovich, and Chitta Baral, “Towards Feasible Approach to Plan Checking Under Probabilistic Uncertainty: Interval Methods”, *Proc. of the 17th National Conference on Artificial Intelligence AAAI’2000*, Austin, TX, July 30–August 3, 2000, pp. 545–550.

Chitta Baral, Le-Chi Tuan, Raúl Trejo, and Vladik Kreinovich, “Computational Complexity of Planning Based on Partial Information About The System’s Present and Past States”, In: J. Lloyd et al. (eds.), *Proceedings of the First International Conference on Computational Logic CL’2000*, London, July 24–28, 2000, Springer Lecture Notes in Artificial Intelligence, Vol. 1861, pp. 882–896.

Roberto A. Osegueda, Carlos Ferregut, Vladik Kreinovich, Seelam Seetharami, and Harry Schulte, “Fuzzy (Granular) Levels of Quality, With Applications to Data Mining and to Structural Integrity of Aerospace Structures”, *Proceedings of the 19th International Conference of the North American Fuzzy Information Society NAFIPS’2000*, Atlanta, Georgia, July 13–15, 2000, pp. 348–352.

Vladik Kreinovich and Hung T. Nguyen, “Granularity as an Optimal Approach to Uncertainty – A General Mathematical Idea With Applications to Sleep, Consumption, Traffic Control, Learning, etc.”, *Proceedings of the 19th International Conference of the North American Fuzzy Information Society NAFIPS’2000*, Atlanta, Georgia, July 13–15, 2000, pp. 316–320.

David D. Coblenz, Vladik Kreinovich, Brian S. Penn, and Scott A. Starks, “Towards Reliable Sub-Division of Geological Areas: Interval Approach” *Proceedings of the 19th International Conference of the North American Fuzzy Information Society NAFIPS’2000*, Atlanta, Georgia, July 13–15, 2000, pp. 368–372.

Hung T. Nguyen, Vladik Kreinovich, and Leonid Reznik, “Integrating Domain Knowledge With Data: From Crisp To Probabilistic and Fuzzy Knowledge”, *Proceedings of the UAI-2000 Workshop on Fusion of Domain Knowledge with Data for Decision Support*, Stanford University, June 30, 2000.

Scott A. Starks and Vladik Kreinovich, “Aerospace applications of soft computing and interval computations (with an emphasis on multi-spectral satellite imaging)”, In: Mo Jamshidi, Madjid Fathi, and Takeshi Furunashi (eds.), *Soft Computing, Multimedia, and Image Processing. Proceedings of the 2000 World Automation Congress WAC’2000, Maui, Hawaii, June 11–16, 2000*, TSI Press, Albuquerque, 2000, pp. 644–651.

Matthew R. Barry, Vladik Kreinovich, and Nguyen Hoang Phuong, “Towards the optimal choice of data channels for monitoring a space flight”, In: Mo Jamshidi,

Madjid Fathi, and Takeshi Furunashi (eds.), *Soft Computing, Multimedia, and Image Processing. Proceedings of the 2000 World Automation Congress WAC'2000, Maui, Hawaii, June 11–16, 2000*, TSI Press, Albuquerque, 2000, pp. 652–658.

Vladik Kreinovich and Masao Mukaidono, “Intervals (Pairs of Fuzzy Values), Triples, etc.: Can We Thus Get an Arbitrary Ordering?”, *Proceedings of the 9th IEEE International Conference on Fuzzy Systems (FUZZ-IEEE'2000)*, San Antonio, Texas, May 7–10, 2000, Vol. 1, pp. 234–238.

Hung T. Nguyen, Berlin Wu, and Vladik Kreinovich, “Shadows of Fuzzy Sets – A Natural Approach Towards Describing 2-D and Multi-D Fuzzy Uncertainty in Linguistic Terms”, *Proceedings of the 9th IEEE International Conference on Fuzzy Systems (FUZZ-IEEE'2000)*, San Antonio, Texas, May 7–10, 2000, Vol. 1, pp. 340–345.

Hung T. Nguyen, Abraham Kandel, and Vladik Kreinovich, “Complex Fuzzy Sets: Towards New Foundations”, *Proceedings of the 9th IEEE International Conference on Fuzzy Systems (FUZZ-IEEE'2000)*, San Antonio, Texas, May 7–10, 2000, Vol. 2, pp. 1045–1048.

Nhu Nguyen, Hung T. Nguyen, and Vladik Kreinovich, “Chu Spaces: Towards New Justification for Fuzzy Heuristics”, In: Leo Obrst and Inderjeet Mani (eds.), *Proceeding of the Workshop on Semantic Approximation, Granularity, and Vagueness, A Workshop of the Seventh International Conference on Principles of Knowledge Representation and Reasoning KR'2000*, Breckenridge, Colorado, April 11, 2000, pp. 51–56.

Matthew Barry and Vladik Kreinovich, “Which Sensor Set Is Better For Monitoring Space Shuttle?” *Proceedings of the Joint Conferences in Information Sciences JCIS'2000*, Atlantic City, NJ, February 27–March 3, 2000, Vol. I, pp. 244–247.

Laszlo T. Koczy, Vladik Kreinovich, Yohans Mendoza, Hung T. Nguyen, and Harry Schulte, “Towards Mathematical Foundations of Information Retrieval: Dependence of Website's Relevance on the Number of Occurrences of a Queried Word”, *Proceedings of the Joint Conferences in Information Sciences JCIS'2000*, Atlantic City, NJ, February 27–March 3, 2000, Vol. I, pp. 252–255.

Jürgen Wolff von Gudenberg and Vladik Kreinovich, “Candidate Sets for Complex Interval Arithmetic”, In: Hrshiksha Mohanty and Chitta Baral (eds.), *Trends in Information Technology, Proceedings of the International Conference on Information Technology ICIT'99, Bhubaneswar, India, December 20–22, 1999*, Tata McGraw-Hill, New Delhi, 2000, pp. 230–233.

Hung T. Nguyen, Berlin Wu, and Vladik Kreinovich, “On Combining Statistical and Fuzzy Techniques: Detection of Business Cycles From Uncertain Data”, In: Hrshiksha Mohanty and Chitta Baral (eds.), *Trends in Information Technology, Proceedings of the International Conference on Information Technology ICIT'99, Bhubaneswar, India, December 20–22, 1999*, Tata McGraw-Hill, New Delhi, 2000, pp. 69–74.

Vladik Kreinovich, Scott Ferson, Lev Ginzburg, Harry Schulte, Matthew R. Barry, and Hung T. Nguyen, “From Interval Methods of Representing Uncertainty To A General Description of Uncertainty”, In: Hrushikesh Mohanty and Chitta Baral (eds.), *Trends in Information Technology, Proceedings of the International Conference on Information Technology ICIT'99, Bhubaneswar, India, December 20–22, 1999*, Tata McGraw-Hill, New Delhi, 2000, pp. 161–166.

Yeung Yam, Hung T. Nguyen, and Vladik Kreinovich, “Multi-Resolution Techniques in the Rules-Based Intelligent Control Systems: A Universal Approximation Result”, *Proceedings of the 14th IEEE International Symposium on Intelligent Control/Intelligent Systems and Semiotics ISIC/ISAS'99*, Cambridge, Massachusetts, September 15–17, 1999, pp. 213–218.

Roberto Osegueda, Yohans Mendoza, Olga Kosheleva, and Vladik Kreinovich, “Multi-Resolution Methods in Non-Destructive Testing of Aerospace Structures and in Medicine”, *Proceedings of the 14th IEEE International Symposium on Intelligent Control/Intelligent Systems and Semiotics ISIC/ISAS'99*, Cambridge, Massachusetts, September 15–17, 1999, pp. 208–212.

Vladik Kreinovich and Nadipuram R. Prasad, “The Use of Fuzzy Measures in Pain Relief Control”, *Proceedings of the International Symposium on Medical Informatics and Fuzzy Technology MIF'99*, Hanoi, Vietnam, August 27–29, 1999, pp. 447–453.

Nguyen Hoang Phuong, Vladik Kreinovich, Nguyen Viet Anh, and Uong Huong Duong, “Implementation of an interval-based expert system for diagnosis in oriental traditional medicine”, *Proceedings of the International Symposium on Medical Informatics and Fuzzy Technology MIF'99*, Hanoi, Vietnam, August 27–29, 1999, pp. 486–494.

Vladik Kreinovich, Hung T. Nguyen, and Berlin Wu, “Justification of Heuristic Methods in Data Processing Using Fuzzy Theory, with Applications to Detection of Business Cycles From Fuzzy Data”, *Proceedings of the 8th IEEE International Conference on Fuzzy Systems (FUZZ-IEEE'99)*, Seoul, Korea, August 22–25, 1999, Vol. 2, pp. 1131–1136.

Richard Aló, Kenneth Aló, and Vladik Kreinovich, “Towards Intelligent Virtual Environment for Training Medical Doctors in Surgical Pain Relief”, *Proceedings of The Eighth International Fuzzy Systems Association World Congress IFSA '99*, Taipei, Taiwan, August 17–20, 1999, pp. 260–264.

Chitta Baral, Vladik Kreinovich, Hung T. Nguyen, and Yeung Yam, “From Fuzzy Models to Fuzzy Control”, *Proceedings of The Eighth International Fuzzy Systems Association World Congress IFSA '99*, Taipei, Taiwan, August 17–20, 1999, pp. 246–250.

Hung T. Nguyen, Berlin Wu, and Vladik Kreinovich, “A New Look at Fuzzy Theory Via Chu Spaces”, *Proceedings of The Eighth International Fuzzy Systems Association World Congress IFSA '99*, Taipei, Taiwan, August 17–20, 1999, pp. 237–240.

Masao Mukaidono, Yeung Yam, and Vladik Kreinovich, “Intervals is All We Need: An Argument”, *Proceedings of The Eighth International Fuzzy Systems Association World Congress IFSA '99*, Taipei, Taiwan, August 17–20, 1999, pp. 147–150.

Yeung Yam, Masao Mukaidono, and Vladik Kreinovich, “Beyond $[0,1]$ to Intervals and Further: Do We Need All New Fuzzy Values?”, *Proceedings of The Eighth International Fuzzy Systems Association World Congress IFSA '99*, Taipei, Taiwan, August 17–20, 1999, pp. 143–146.

Vladik Kreinovich, Guoqing Liu, and Hung T. Nguyen, “Chu Spaces – A New Approach to Describing Uncertainty in Systems”, In: Jaime Ramírez-Angulo (ed.), *Proceedings of the 1999 IEEE Midwest Symposium on Circuits and Systems*, Las Cruces, New Mexico, August 8–11, 1999, Vol. 1, pp. 427–430.

Murali Krishna, Vladik Kreinovich, and Roberto Osegueda, “Fuzzy Logic in Non-Destructive Testing of Aerospace Structures”, In: Jaime Ramírez-Angulo (ed.), *Proceedings of the 1999 IEEE Midwest Symposium on Circuits and Systems*, Las Cruces, New Mexico, August 8–11, 1999, Vol. 1, pp. 431–434.

Martin Schmidt, Vladik Kreinovich, and Luc Longpré, “Kolmogorov Complexity-Based Ideas for Locating Text in Web Images”, In: Jaime Ramírez-Angulo (ed.), *Proceedings of the 1999 IEEE Midwest Symposium on Circuits and Systems*, Las Cruces, New Mexico, August 8–11, 1999, Vol. 1, pp. 543–546.

Chitta Baral, Vladik Kreinovich, and Raúl Trejo, “Computational Complexity of Planning and Approximate Planning in Presence of Incompleteness”, *Proceedings of the Sixteenth International Joint Conference on Artificial Intelligence IJCAI'99*, Stockholm, Sweden, July 31 – August 6, 1999, Vol. 2, pp. 948–953.

Hung T. Nguyen, Vladik Kreinovich, and Berlin Wu, “Chu Spaces - A New Approach to Diagnostic Information Fusion”, *Proceedings of the 2nd International Conference on Information Fusion FUSION'99*, Sunnyvale, CA, July 6–8, 1999, Vol. 1, pp. 323–330.

Gennadij N. Solopchenko, Vladik Kreinovich, and Leonid Reznik, “Development of mathematical structure of the modern measurement science”, *Proceedings of the IMEKO TC-7 International Workshop on Advances of Measurement Science*, Kyoto, Japan, June 20–21, 1999, pp. 35–47.

Leonid Reznik, A. Stojcevski, and Vladik Kreinovich, “Modelling of human measurement functions as a way of intelligent sensor design”, In: H. Imai (ed.), *Measurement to Improve Quality of Life in the 21st Century, Proceedings of the IMEKO-XV World Congress*, Osaka, Japan, June 13–18, 1999, Vol. XI, pp. 75–82.

Hung T. Nguyen, Vladik Kreinovich, and Guoqing Liu, “Chu Spaces: Towards New Foundations for Fuzzy Logic and Fuzzy Control, with Applications to Information Flow on the World Wide Web”, *Proceedings of the 18th International Conference of the North American Fuzzy Information Society NAFIPS'99*, New York City, June 10–12, 1999, pp. 766–770.

Yeung Yam, Roberto Osegueda and Vladik Kreinovich, “Towards Faster, Smoother, and More Compact Fuzzy Approximation, with an Application to Non-Destructive Evaluation of Space Shuttle’s Structural Integrity”, *Proceedings of the 18th International Conference of the North American Fuzzy Information Society NAFIPS’99*, New York City, June 10–12, 1999, pp. 243–247.

Timothy J. Ross, Carlos Ferregut, Roberto Osegueda, and Vladik Kreinovich, “System Reliability: A Case When Fuzzy Logic Enhances Probability Theory’s Ability to Deal With Real-World Problems”, *Proceedings of the 18th International Conference of the North American Fuzzy Information Society NAFIPS’99*, New York City, June 10–12, 1999, pp. 81–84.

Núria Mata and Vladik Kreinovich, “NP-Hardness In Geometric Construction Problems With One Interval Parameter”, *Proceedings of the Workshop on Applications of Interval Analysis to Systems and Control with special emphasis on recent advances in Modal Interval Analysis MISC’99*, Girona, Spain, February 24–26, 1999, pp. 85–98.

Vladik Kreinovich, “From semi-heuristic fuzzy techniques to optimal fuzzy methods: mathematical foundations and applications”, In: Basil Papadopoulos and Apostolos Syropoulos (eds.), *Current Trends and Developments in Fuzzy Logic, Proceedings of the First International Workshop*, Thessaloniki, Greece, October 16–20, 1998, pp. 1–62.

Vladik Kreinovich, Hung T. Nguyen, Scott A. Starks, and Yeung Yam, “Decision making based on satellite images: optimal fuzzy clustering approach”, *Proceedings of the 37th IEEE Conference on Decision and Control CDC’98*, Tampa, Florida, December 16–18, 1998, pp. 4246–4251.

Daniel E. Cooke and Vladik Kreinovich, “Automatic concurrency in SequenceL”, In: Luqi (ed.), *Proceedings of the 1998 ARO/ONR/NSF/DARPA Monterey Workshop on Engineering Automation for Computer Based Systems, Carmel, CA, October 23–26, 1998*, Naval Postgraduate School, Monterey, CA, April 1999, pp. 47–56.

Daniel E. Cooke, Vladik Kreinovich, and Joseph E. Urban, “A distributed version of the SequenceL language”, *Proceedings of the 17th IEEE Symposium on Reliable Distributed Systems*, West Lafayette, IN, October 20–23, 1998, pp. 295–301.

Hung T. Nguyen and Vladik Kreinovich, “Possible new directions in mathematical foundations of fuzzy technology: a contribution to the mathematics of fuzzy theory”, In: Nguyen Hoang Phuong and Ario Ohsato (eds.), *Proceedings of the Vietnam-Japan Bilateral Symposium on Fuzzy Systems and Applications VJFUZZY’98*, HaLong Bay, Vietnam, 30th September–2nd October, 1998, pp. 9–32.

Oscar N. Garcia, Vladik Kreinovich, Luc Longpré, and Hung T. Nguyen, “Complex problems: granularity is necessary, granularity helps”, In: Nguyen Hoang Phuong and Ario Ohsato (eds.), *Proceedings of the Vietnam-Japan Bilateral Symposium on Fuzzy Systems and Applications VJFUZZY’98*, HaLong Bay, Vietnam, 30th September–2nd October, 1998, pp. 449–455.

Misha Koshelev, Vladik Kreinovich, Hung T. Nguyen, and Bernadette Bouchon-Meunier, “Uncertainty representation explains and helps methodology of physics and science in general”, In: Nguyen Hoang Phuong and Ario Ohsato (eds.), *Proceedings of the Vietnam-Japan Bilateral Symposium on Fuzzy Systems and Applications VJFUZZY’98*, HaLong Bay, Vietnam, 30th September–2nd October, 1998, pp. 577–585.

Olga Kosheleva, Vladik Kreinovich, Hung T. Nguyen, and Bernadette Bouchon-Meunier, “How to describe partially ordered preferences: mathematical foundations”, In: Nguyen Hoang Phuong and Ario Ohsato (eds.), *Proceedings of the Vietnam-Japan Bilateral Symposium on Fuzzy Systems and Applications VJFUZZY’98*, HaLong Bay, Vietnam, 30th September–2nd October, 1998, pp. 269–278.

Vladik Kreinovich, Edye Johnson-Holubec, Leonid K. Reznik, and Misha Koshelev, “Cooperative learning is better: explanation using dynamical systems, fuzzy logic, and geometric symmetries”, In: Nguyen Hoang Phuong and Ario Ohsato (eds.), *Proceedings of the Vietnam-Japan Bilateral Symposium on Fuzzy Systems and Applications VJFUZZY’98*, HaLong Bay, Vietnam, 30th September–2nd October, 1998, pp. 154–160.

Vladik Kreinovich, Luc Longpré, and Hung T. Nguyen, “Towards formalization of feasibility, randomness, and commonsense implication: Kolmogorov complexity, and the necessity of considering (fuzzy) degrees”, In: Nguyen Hoang Phuong and Ario Ohsato (eds.), *Proceedings of the Vietnam-Japan Bilateral Symposium on Fuzzy Systems and Applications VJFUZZY’98*, HaLong Bay, Vietnam, 30th September–2nd October, 1998, pp. 294–302.

Hung T. Nguyen, Vladik Kreinovich, Daniel E. Cooke, Luqi, and Olga Kosheleva, “Towards combining fuzzy and logic programming techniques”, In: Nguyen Hoang Phuong and Ario Ohsato (eds.), *Proceedings of the Vietnam-Japan Bilateral Symposium on Fuzzy Systems and Applications VJFUZZY’98*, HaLong Bay, Vietnam, 30th September–2nd October, 1998, pp. 482–489.

Hoang Phuong Nguyen, Scott Starks, and Vladik Kreinovich, “Towards foundations for traditional oriental medicine”, In: Nguyen Hoang Phuong and Ario Ohsato (eds.), *Proceedings of the Vietnam-Japan Bilateral Symposium on Fuzzy Systems and Applications VJFUZZY’98*, HaLong Bay, Vietnam, 30th September–2nd October, 1998, pp. 704–708.

Hoang Phuong Nguyen, Scott Starks, and Vladik Kreinovich, “Interval-based expert systems and their use for traditional oriental medicine”, In: Nguyen Hoang Phuong and Ario Ohsato (eds.), *Proceedings of the Vietnam-Japan Bilateral Symposium on Fuzzy Systems and Applications VJFUZZY’98*, HaLong Bay, Vietnam, 30th September–2nd October, 1998, pp. 697–703.

Vladik Kreinovich, “Interval Computations, Soft Computing, and Aerospace Applications”, *Proceedings of the 2nd International Workshop on Intelligent Virtual Environments*, Xalapa, Veracruz, Mexico, September 11–12, 1998, pp. 25–41.

Richard Aló, Kenneth Aló, Obinna Ilochonwu, Vladik Kreinovich, and Hoang Phuong Nguyen, “Towards Optimal Pain Relief: Acupuncture and Spinal Cord Stimulation”, *Proceedings of the 2nd International Workshop on Intelligent Virtual Environments*, Xalapa, Veracruz, Mexico, September 11–12, 1998, pp. 16–24.

Alejandro E. Brito and Vladik Kreinovich, “Interval Image Classification is NP-Hard”, *Proceedings of the 2nd International Workshop on Intelligent Virtual Environments*, Xalapa, Veracruz, Mexico, September 11–12, 1998, pp. 12–15.

L. Olac Fuentes and Vladik Kreinovich, “Towards Intelligent Virtual Environment for Teaching Telemanipulation Operators: Virtual Tool Approach and its Interval-Based Justification”, *Proceedings of the 2nd International Workshop on Intelligent Virtual Environments*, Xalapa, Veracruz, Mexico, September 11–12, 1998, pp. 8–11.

Olga Kosheleva, Sergio Cabrera, Roberto Osegueda, Soheil Nazarian, Debra L. George, Mary J. George, Vladik Kreinovich, and Keith Worden, “Case study of non-linear inverse problems: mammography and non-destructive evaluation”, In: Ali Mohamad-Djafari (ed.), *Bayesian Inference for Inverse Problems*, Proceedings of the SPIE/International Society for Optical Engineering, Vol. 3459, San Diego, CA, 1998, pp. 128–135.

Scott A. Starks and Vladik Kreinovich, “Multi-spectral inverse problems in satellite image processing”, In: Ali Mohamad-Djafari (ed.), *Bayesian Inference for Inverse Problems*, Proceedings of the SPIE/International Society for Optical Engineering, Vol. 3459, San Diego, CA, 1998, pp. 138–146.

Vladik Kreinovich, “A simplified version of the tomography problem can help to estimate the errors of indirect measurements”, In: Ali Mohamad-Djafari (ed.), *Bayesian Inference for Inverse Problems*, Proceedings of the SPIE/International Society for Optical Engineering, Vol. 3459, San Diego, CA, 1998, pp. 106–115.

Vladik Kreinovich, Luc Longpré, and Misha Koshelev, “Kolmogorov complexity, statistical regularization of inverse problems, and Birkhoff’s formalization of beauty”, In: Ali Mohamad-Djafari (ed.), *Bayesian Inference for Inverse Problems*, Proceedings of the SPIE/International Society for Optical Engineering, Vol. 3459, San Diego, CA, 1998, pp. 159–170.

Hung T. Nguyen, Vladik Kreinovich, and Richard Aló, “Adding Fuzzy Integral to Fuzzy Control”, *Proceedings of the International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems (IPMU’98)*, Paris, France, July 6–10, 1998, pp. 657–664.

Olga Kosheleva, Vladik Kreinovich, Bernadette Bouchon-Meunier, and Radko Mesiar, “Operations with Fuzzy Numbers Explain Heuristic Methods in Image Processing”, *Proceedings of the International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems (IPMU’98)*, Paris, France, July 6–10, 1998, pp. 265–272.

Hung T. Nguyen, Misha Koshelev, Olga Kosheleva, Vladik Kreinovich, and Radko Mesiar, “Computational Complexity and Feasibility of Fuzzy Data Processing:

Why Fuzzy Numbers, Which Fuzzy Numbers, Which Operations with Fuzzy Numbers”, *Proceedings of the International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems (IPMU'98)*, Paris, France, July 6–10, 1998, pp. 273–280.

Leonid Reznik, Vladik Kreinovich, Walter Giardini, Kishor P. Dabke, “Feasibility study of soft computing methods application for uncertainty evaluation”, *Proceedings of the International Conference on Soft Computing and Measurement SCM'98*, St. Petersburg, Russia, June 22–26, 1998.

Hung T. Nguyen and Vladik Kreinovich, “A Modification of Sugeno Integral Describes Stability and Smoothness of Fuzzy Control”, *Proceedings of the FUZZ-IEEE'98 International Conference on Fuzzy Systems*, Anchorage, Alaska, May 4–9, 1998, Vol. 1, pp. 360–365.

Daniel E. Cooke, Vladik Kreinovich, and Scott A. Starks, “ALPS: A Logic for Program Synthesis (Motivated by Fuzzy Logic)”, *Proceedings of the FUZZ-IEEE'98 International Conference on Fuzzy Systems*, Anchorage, Alaska, May 4–9, 1998, Vol. 1, pp. 779–784.

Vladik Kreinovich, Anatoly Lakeyev, Jiří Rohn, Patrick Kahl, “Computational Complexity and Feasibility of Data Processing and Interval Computations: A Survey”, *International Conference on Interval Methods and their Application in Global Optimization (INTERVAL'98)*, April 20–23, Nanjing, China, *Extended Abstracts*, 1998, pp. 58–60.

Scott A. Starks and Vladik Kreinovich, “Non-Interval Extension of Interval Methods Leads to a New 5D Geometric Formalism for Physics and Data Processing”, *International Conference on Interval Methods and their Application in Global Optimization (INTERVAL'98)*, April 20–23, Nanjing, China, *Abstracts*, 1998, pp. 136–138.

Keith Worden, Roberto Osegueda, Carlos Ferregut, Soheil Nazarian, Debra L. George, Mary J. George, Vladik Kreinovich, Olga Kosheleva, and Sergio Cabrera, “Interval Methods in Non-Destructive Testing of Aerospace Structures and in Mammography”, *International Conference on Interval Methods and their Application in Global Optimization (INTERVAL'98)*, April 20–23, Nanjing, China, *Abstracts*, 1998, pp. 152–154.

Vladik Kreinovich and Luc Longpré, “Guaranteed Predictions Based on Probabilistic Knowledge: Why and How”, *International Conference on Interval Methods and their Application in Global Optimization (INTERVAL'98)*, April 20–23, Nanjing, China, *Abstracts*, 1998, pp. 61–63.

Ann Gates, Vladik Kreinovich, Leticia Sifuentes, and Scott Starks, “OO Or Not OO: When Object-Oriented is Better. Qualitative Analysis and Application to Satellite Image Processing”, In: Goetz Alefeld and Raul A. Trejo (eds.), *Interval Computations and its Applications to Reasoning Under Uncertainty, Knowledge Representation, and Control Theory. Proceedings of MEXICON'98, Workshop on Interval Computations, 4th World Congress on Expert Systems*, México City, México, 1998.

R. Baker Kearfott and Vladik Kreinovich, “Where to Bisect a Box? A Theoretical Explanation of the Experimental Results”, In: Goetz Alefeld and Raul A. Trejo (eds.), *Interval Computations and its Applications to Reasoning Under Uncertainty, Knowledge Representation, and Control Theory. Proceedings of MEXICON’98, Workshop on Interval Computations, 4th World Congress on Expert Systems*, México City, México, 1998.

Vladik Kreinovich and L. Olac Fuentes, “Telem Manipulation: The Virtual Tool Approach and Its Interval-Based Justification”, In: Goetz Alefeld and Raul A. Trejo (eds.), *Interval Computations and its Applications to Reasoning Under Uncertainty, Knowledge Representation, and Control Theory. Proceedings of MEXICON’98, Workshop on Interval Computations, 4th World Congress on Expert Systems*, México City, México, 1998.

Scott A. Starks, Hung T. Nguyen, Vladik Kreinovich, Hoang Phuong Nguyen, and Mirko Navara, “Strong Negation: Its Relation to Intervals and Its Use in Expert Systems”, In: Goetz Alefeld and Raul A. Trejo (eds.), *Interval Computations and its Applications to Reasoning Under Uncertainty, Knowledge Representation, and Control Theory. Proceedings of MEXICON’98, Workshop on Interval Computations, 4th World Congress on Expert Systems*, México City, México, 1998.

Raul Trejo and Vladik Kreinovich, “Complexity of Collective Decision Making Explained by Neural Network Universal Approximation Theorem”, In: Goetz Alefeld and Raul A. Trejo (eds.), *Interval Computations and its Applications to Reasoning Under Uncertainty, Knowledge Representation, and Control Theory. Proceedings of MEXICON’98, Workshop on Interval Computations, 4th World Congress on Expert Systems*, México City, México, 1998.

Keith Worden, Roberto Osegueda, Carlos Ferregut, Soheil Nazarian, Eulalio Rodriguez, Debra L. George, Mary J. George, Vladik Kreinovich, Olga Kosheleva, and Sergio Cabrera, “Interval Approach to Non-Destructive Testing of Aerospace Structures and to Mammography”, In: Goetz Alefeld and Raul A. Trejo (eds.), *Interval Computations and its Applications to Reasoning Under Uncertainty, Knowledge Representation, and Control Theory. Proceedings of MEXICON’98, Workshop on Interval Computations, 4th World Congress on Expert Systems*, México City, México, 1998.

Kenneth M. Aló, Richard Aló, Andre de Korvin, and Vladik Kreinovich, “Spinal Cord Stimulation for Chronic Pain Management: Towards an Expert System”, *Proceedings of the 4th World Congress on Expert Systems, Mexico City, March 16–20, 1998*, Vol. 1, pp. 156–164.

Vladik Kreinovich, “Neural networks and fuzzy logic”, In: Richard Aló, Ana L. Solis, and Homero Rios (Eds.), *Proceedings of the International Workshop on Distributed Simulation, Artificial Intelligence, and Virtual Environments*, Mexico City, February 22–23, 1998, pp. 70–141

Hung T. Nguyen, Vladik Kreinovich, and Bernadette Bouchon-Meunier, “Soft Computing Explains Heuristic Numerical Methods in Data Processing and in Logic Programming”, preliminary version appeared in *Working Notes of the AAAI*

Symposium on Frontiers in Soft Computing and Decision Systems, Boston, MA, November 8–10, 1997, pp. 40–45; final version is in Larry Medsker (ed.), *Frontiers in Soft Computing and Decision Systems*, AAAI Press (Publication No. FS-97-04), 1997, pp. 30–35.

Scott Starks and Vladik Kreinovich, “Soft Computing: Frontiers? A Case Study of Hyper-Spectral Satellite Imaging”, preliminary version appeared in *Working Notes of the AAAI Symposium on Frontiers in Soft Computing and Decision Systems*, Boston, MA, November 8–10, 1997, p. 66–71; final version is in Larry Medsker (ed.), *Frontiers in Soft Computing and Decision Systems*, AAAI Press (Publication No. FS-97-04), 1997, pp. 52–57.

Roberto Osegueda, Carlos Ferregut, Mary J. George, Jose M. Gutierrez, and Vladik Kreinovich, “Computational geometry and artificial neural networks: a hybrid approach to optimal sensor placement for aerospace NDE”, In: Carlos Ferregut, Roberto Osegueda, and Alina Nuñez (eds.), *Proceedings of the International Workshop on Intelligent NDE Sciences for Aging and Futuristic Aircraft*, El Paso, TX, September 30–October 2, 1997, pp. 59–71.

M. Koshelev and V. Kreinovich, “Towards Computers of Generation Omega – Non-Equilibrium Thermodynamics, Granularity, and Acausal Processes: A Brief Survey”, *Proceedings of the International Conference on Intelligent Systems and Semiotics (ISAS’97)*, National Institute of Standards and Technology Publ., Gaithersburg, MD, 1997, pp. 383–388.

Roberto Osegueda, Carlos Ferregut, Mary J. George, Jose M. Gutierrez, and Vladik Kreinovich, “Non-Equilibrium Thermodynamics Explains Semiotic Shapes: Applications to Astronomy and to Non-Destructive Testing of Aerospace Systems”, *Proceedings of the International Conference on Intelligent Systems and Semiotics (ISAS’97)*, National Institute of Standards and Technology Publ., Gaithersburg, MD, 1997, pp. 378–382.

S. A. Starks, V. Kreinovich, and A. Meystel, “Multi-Resolution Data Processing: It is Necessary, It is Possible, It is Fundamental”, *Proceedings of the International Conference on Intelligent Systems and Semiotics (ISAS’97)*, National Institute of Standards and Technology Publ., Gaithersburg, MD, 1997, pp. 145–150.

Vladik Kreinovich and Luc Longpré, “How The Theory of Computing Can Help in Space Exploration”, *Proceedings of the NASA University Research Centers Conference*, Albuquerque, New Mexico, February 16–19, 1997, pp. 443–446.

Hung T. Nguyen and Vladik Kreinovich, “On Re-Scaling In Fuzzy Control and Genetic Algorithms”, *Proceedings of the 1996 IEEE International Conference on Fuzzy Systems*, New Orleans, September 8–11, 1996, Vol. 3, pp. 1677–1681.

Hung T. Nguyen and Vladik Kreinovich, “Classical-Logic Analogue of a Fuzzy ‘Paradox’ ”, *Proceedings of the 1996 IEEE International Conference on Fuzzy Systems*, New Orleans, September 8–11, 1996, Vol. 1, pp. 428–431.

Vladik Kreinovich and Raul Trejo, “Optimal interval computation techniques: optimization of numerical methods in case of uncertainty”, In: Marcilia A. Campos

(ed.), *Abstracts of the II Workshop on Computer Arithmetic, Interval and Symbolic Computation (WAI'96)*, Recife, Pernambuco, Brazil, August 7-8, 1996, pp. 48–50.

Slava Nesterov and Vladik Kreinovich, “The worse, the better: a survey of paradoxical computational complexity of interval computations”, In: Marcilia A. Campos (ed.), *Abstracts of the II Workshop on Computer Arithmetic, Interval and Symbolic Computation (WAI'96)*, Recife, Pernambuco, Brazil, August 7-8, 1996, pp. 61A–63A.

Bernadette Bouchon-Meunier, Olga Kosheleva, Vladik Kreinovich, and Hung T. Nguyen, “Fuzzy Numbers are the Only Fuzzy Sets That Keep Invertible Operations Invertible”, *Proceedings of the International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems (IPMU'96)*, Granada, Spain, July 1–5, 1996, Vol. 2, pp. 1049–1054.

Bernadette Bouchon-Meunier and Vladik Kreinovich, “Simulating Fuzzy Control as a New Method of Eliciting Membership Functions”, *Proceedings of the International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems (IPMU'96)*, Granada, Spain, July 1–5, 1996, Vol. 2, pp. 1043–1048.

Hung T. Nguyen and Vladik Kreinovich, “Fuzzy Logic, Logic Programming, and Linear Logic: Towards a New Understanding of Common Sense”, *Proceedings of NAFIPS'96, Biennial Conference of the North American Fuzzy Information Processing Society*, Berkeley, CA, June 20–22, 1996, pp. 546–550.

Louis Irwin and Vladik Kreinovich, “Adding predators to genetic algorithms”, In: Vladimir Dimitrov and Judith Dimitrov (eds.), *Fuzzy Logic and the Management of Complexity (Proceedings of the 1996 International Discourse)*, UTS Publ., Sydney, Australia, 1996, Vol. 3, pp. 289–291.

Misha Koshelev and Vladik Kreinovich, “Fuzzy interpretation of quantum mechanics made more convincing: every statement with real numbers can be reformulated in logical terms”, In: Vladimir Dimitrov and Judith Dimitrov (eds.), *Fuzzy Logic and the Management of Complexity (Proceedings of the 1996 International Discourse)*, UTS Publ., Sydney, Australia, 1996, Vol. 3, pp. 296–299.

I. Burhan Turksen and V. Kreinovich, “Fuzzy implication revisited: a new type of fuzzy implication explains Yager’s implication operation”, In: Vladimir Dimitrov and Judith Dimitrov (eds.), *Fuzzy Logic and the Management of Complexity (Proceedings of the 1996 International Discourse)*, UTS Publ., Sydney, Australia, 1996, Vol. 3, pp. 292–295.

Leonid K. Reznik and Vladik Kreinovich, “Fuzzy information improves measurement (if this information is correct)”, In: Vladimir Dimitrov and Judith Dimitrov (eds.), *Fuzzy Logic and the Management of Complexity (Proceedings of the 1996 International Discourse)*, UTS Publ., Sydney, Australia, 1996, Vol. 2, pp. 206–210.

Věra Kůrková, Paul C. Kainen, and Vladik Kreinovich, “Dimension-independent rates of approximation by neural networks and variation with respect to half-

spaces”, *Proceedings of World Congress on Neural Networks, WCNN’95, Washington, DC, July 1995*, INNS Press, NJ, 1995, Vol. I, pp. 54–57.

Olga Kosheleva, Vladik Kreinovich, and Hung T. Nguyen, “Mamdani’s Rule: a “weird” use of “and” as implication justified by modern logic”, *Sixth International Fuzzy Systems Association World Congress*, San Paulo, Brazil, July 22–28, 1995, Vol. 1, pp. 229–232.

Claude Langrand, Vladik Kreinovich, and Hung T. Nguyen, “Two-dimensional fuzzy logic for expert systems”, *Sixth International Fuzzy Systems Association World Congress*, San Paulo, Brazil, July 22–28, 1995, Vol. 1, pp. 221–224.

Hung T. Nguyen and Vladik Kreinovich, “On Logical Equivalence in Fuzzy Logic”, *Sixth International Fuzzy Systems Association World Congress*, San Paulo, Brazil, July 22–28, 1995, Vol. 1, pp. 209–212.

Ongard Sirisaengtaksin, Vladik Kreinovich, and Hung T. Nguyen “Sigmoid neurons are the safest against additive errors”, *Proceedings of the First International Conference on Neural, Parallel, and Scientific Computations*, Atlanta, GA, May 28–31, 1995, Vol. 1, pp. 419–423.

Ongard Sirisaengtaksin, Paul Kainen, Vladik Kreinovich, and Vera Kurkova, “For neural networks, even approximate function determines form”, *Proceedings of the First International Conference on Neural, Parallel, and Scientific Computations*, Atlanta, GA, May 28–31, 1995, Vol. 1, pp. 424–426.

Ongard Sirisaengtaksin, L. Olac Fuentes, and Vladik Kreinovich, “Non-traditional neural networks that solve one more intractable problem: propositional satisfiability”, *Proceedings of the First International Conference on Neural, Parallel, and Scientific Computations*, Atlanta, GA, May 28–31, 1995, Vol. 1, pp. 427–430.

Vladik Kreinovich and Hung T. Nguyen, “On Hilbert’s Thirteenth Problem for Soft Computing”, *Proceedings of the Joint 4th IEEE Conference on Fuzzy Systems and 2nd IFES*, Yokohama, Japan, March 20–24, 1995, Vol. IV, pp. 2089–2094.

Hung T. Nguyen and Vladik Kreinovich, “When is an algorithm feasible? Soft computing approach”, *Proceedings of the Joint 4th IEEE Conference on Fuzzy Systems and 2nd IFES*, Yokohama, Japan, March 20–24, 1995, Vol. IV, pp. 2109–2112.

Maria Beltran and Vladik Kreinovich, “How To Find Input Variables Whose Influence On The Result Is The Largest, or, How To Detect Defective Stages In VLSI Manufacturing?”, *Reliable Computing*, 1995, Supplement (Extended Abstracts of APIC’95: International Workshop on Applications of Interval Computations, El Paso, TX, Febr. 23–25, 1995), pp. 34–37.

Andrew Bernat, Vladik Kreinovich, Thomas McLean, and Gennady N. Solopchenko, “What are interval computations, and how are they related to quality in manufacturing?”, *Reliable Computing*, 1995, Supplement (Extended Abstracts of APIC’95: International Workshop on Applications of Interval Computations, El Paso, TX, Febr. 23–25, 1995), pp. 10–12.

Guido J. Deboeck, Karen Villaverde, and Vladik Kreinovich, “Interval Methods for Presenting Performance of Financial Trading Systems”, *Reliable Computing*, 1995, Supplement (Extended Abstracts of APIC’95: International Workshop on Applications of Interval Computations, El Paso, TX, Febr. 23–25, 1995), pp. 67–70.

Diane I. Doser, Kevin D. Crain, Mark R. Baker, Vladik Kreinovich, Matt C. Gerstenberger, and J. L. Williams, “Estimating uncertainties for geophysical tomography”, *Reliable Computing*, 1995, Supplement (Extended Abstracts of APIC’95: International Workshop on Applications of Interval Computations, El Paso, TX, Febr. 23–25, 1995), pp. 74–75.

A. B. Korlyukov and Vladik Kreinovich, “Equations of physics become consistent if we take measurement uncertainty into consideration”, *Reliable Computing*, 1995, Supplement (Extended Abstracts of APIC’95: International Workshop on Applications of Interval Computations, El Paso, TX, Febr. 23–25, 1995), pp. 111–112.

Vladik Kreinovich, “Data processing beyond traditional statistics: applications of interval computations. A brief introduction”, *Reliable Computing*, 1995, Supplement (Extended Abstracts of APIC’95: International Workshop on Applications of Interval Computations, El Paso, TX, Febr. 23–25, 1995), pp. 13–21.

Anatoly V. Lakeyev and Vladik Kreinovich, “If Input Intervals Are Small Enough, Then Interval Computations Are Almost Always Easy”, *Reliable Computing*, 1995, Supplement (Extended Abstracts of APIC’95: International Workshop on Applications of Interval Computations, El Paso, TX, Febr. 23–25, 1995), pp. 134–139.

Robert N. Lea and Vladik Kreinovich, “Intelligent Control Makes Sense Even Without Expert Knowledge: an Explanation”, *Reliable Computing*, 1995, Supplement (Extended Abstracts of APIC’95: International Workshop on Applications of Interval Computations, El Paso, TX, Febr. 23–25, 1995), pp. 140–145.

Eduardo Serrano, Vera P. Pytchenko, Vladimir M. Rubinstein, and Vladik Kreinovich, “Error Estimate of the Result of Measuring Laser Beam Diameter”, *Reliable Computing*, 1995, Supplement (Extended Abstracts of APIC’95: International Workshop on Applications of Interval Computations, El Paso, TX, Febr. 23–25, 1995), pp. 176–180.

Samuel Smith and Vladik Kreinovich, “In Case of Interval Uncertainty, Optimal Control is NP-Hard Even for Linear Plants, so Expert Knowledge is Needed”, *Reliable Computing*, 1995, Supplement (Extended Abstracts of APIC’95: International Workshop on Applications of Interval Computations, El Paso, TX, Febr. 23–25, 1995), pp. 190–193.

Karen Villaverde and Vladik Kreinovich, “Parallel algorithm that locates local extrema of a function of one variable from interval measurement results”, *Reliable Computing*, 1995, Supplement (Extended Abstracts of APIC’95: International Workshop on Applications of Interval Computations, El Paso, TX, Febr. 23–25, 1995), pp. 212–219.

Qiang Zuo, I. Burhan Turksen, Hung T. Nguyen, and Vladik Kreinovich, “In expert systems, even if we fix AND/OR operations, a natural answer to a composite query is the interval of possible degrees of belief”, *Reliable Computing*, 1995, Supplement (Extended Abstracts of APIC’95: International Workshop on Applications of Interval Computations, El Paso, TX, Febr. 23–25, 1995), pp. 236–240.

Hung T. Nguyen and Vladik Kreinovich, “Towards theoretical foundations of soft computing applications”, *Proceedings of the 11-th IEEE CAAI, Conference on Applications of Artificial Intelligence*, Los Angeles, CA, February 20–22, 1995, pp. 368–373.

Jorge Luis Mora, Benjamin C. Flores, and Vladik Kreinovich. “Suboptimum binary phase code search using a genetic algorithm”, In: Satish D. Udpa and Hsui C. Han (eds.), *Advanced Microwave and Millimeter-Wave Detectors*, Proceedings of the SPIE/International Society for Optical Engineering, Vol. 2275, San Diego, CA, 1994, pp. 168–176.

Scott Starks, Vladik Kreinovich, and Prakash Narasimhamurthy. “How to avoid congestion in computer networks”, In: L. Hall, H. Ying, R. Langari, and J. Yen (eds.), *NAFIPS/IFIS/NASA’94, Proceedings of the First International Joint Conference of The North American Fuzzy Information Processing Society Biannual Conference, The Industrial Fuzzy Control and Intelligent Systems Conference, and The NASA Joint Technology Workshop on Neural Networks and Fuzzy Logic, San Antonio, December 18–21, 1994*, IEEE, Piscataway, NJ, pp. 466–469.

Vladik Kreinovich and Hung T. Nguyen, “Applications of fuzzy intervals: a skeletal outline of papers presented at this section”, In: L. Hall, H. Ying, R. Langari, and J. Yen (eds.), *NAFIPS/IFIS/NASA’94, Proceedings of the First International Joint Conference of The North American Fuzzy Information Processing Society Biannual Conference, The Industrial Fuzzy Control and Intelligent Systems Conference, and The NASA Joint Technology Workshop on Neural Networks and Fuzzy Logic, San Antonio, December 18–21, 1994*, IEEE, Piscataway, NJ, pp. 461–463.

Leopoldo Gemoets, Vladik Kreinovich, and Hector Melendez, “When to stop testing software? A fuzzy interval approach,” In: L. Hall, H. Ying, R. Langari, and J. Yen (eds.), *NAFIPS/IFIS/NASA’94, Proceedings of the First International Joint Conference of The North American Fuzzy Information Processing Society Biannual Conference, The Industrial Fuzzy Control and Intelligent Systems Conference, and The NASA Joint Technology Workshop on Neural Networks and Fuzzy Logic, San Antonio, December 18–21, 1994*, IEEE, Piscataway, NJ, pp. 182–186.

B. Bouchon-Meunier, H. T. Nguyen, V. Kreinovich, and O. Kosheleva, “Optimization with soft constraints: case of fuzzy intervals”, In: L. Hall, H. Ying, R. Langari, and J. Yen (eds.), *NAFIPS/IFIS/NASA’94, Proceedings of the First International Joint Conference of The North American Fuzzy Information Processing Society Biannual Conference, The Industrial Fuzzy Control and Intelligent Systems Conference, and The NASA Joint Technology Workshop on Neural Networks and Fuzzy Logic, San Antonio, December 18–21, 1994*, IEEE, Piscataway, NJ, pp. 177–179.

J. Abello, V. Kreinovich, H. T. Nguyen, S. Sudarsky, and J. Yen, “Comput-

ing an appropriate control strategy based only on a given plant's rule-based model is NP-hard", In: L. Hall, H. Ying, R. Langari, and J. Yen (eds.), *NAFIPS/IFIS/NASA'94, Proceedings of the First International Joint Conference of The North American Fuzzy Information Processing Society Biannual Conference, The Industrial Fuzzy Control and Intelligent Systems Conference, and The NASA Joint Technology Workshop on Neural Networks and Fuzzy Logic, San Antonio, December 18-21, 1994*, IEEE, Piscataway, NJ, pp. 331-332.

Scott Starks, Mario Beruvides, Walter Fisher, Vladik Kreinovich, Silvia Piñon, Mary Clare Robbins, Charles Turner, and Elsa Villa, "Restructuring the freshman year in engineering at UTEP", *Proceedings of the 24th IEEE Annual Frontiers in Education Conference, San Jose, CA, November 2-6, 1994*, pp. 331-335.

Hung T. Nguyen and Vladik Kreinovich, "How stable is a fuzzy linear system?", *Proceedings of the FUZZ-IEEE'94 International Conference*, Orlando, FL, July 1994, Vol. 2, pp. 1023-1027.

Vladik Kreinovich, Ongard Sirisaengtaksin, Sergio Cabrera. "Wavelet neural networks are optimal approximators for functions of one variable." *Proceedings of the IEEE International Conference on Neural Networks*, Orlando, FL, July 1994, Vol. 1, pp. 299-303.

Vladik Kreinovich, Dana Tolbert. "Minimizing computational complexity as a criterion for choosing fuzzy rules and neural activation functions in intelligent control". In: Mohammad Jamshidi, Charles Nguyen, Ronald Lumia, and Junku Yuh (Editors), *Intelligent Automation and Soft Computing. Trends in Research, Development, and Applications. Proceedings of the First World Automation Congress (WAC'94), August 14-17, 1994, Maui, Hawaii*, TSI Press, Albuquerque, NM, 1994, Vol. 1, pp. 545-550.

Vladik Kreinovich, Hung T. Nguyen, Ongard Sirisaengtaksin, "On approximations of controls in distributed systems by fuzzy controllers", *Proceedings of the 5th International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems IPMU'94*, Paris, July 4-8, 1994, Vol. 1, pp. 79-83.

Daniel E. Cooke, Richard Duran, Ann Gates, Vladik Kreinovich, "Bag languages, concurrency, Horn logic programs, and linear logic", *Proceedings of the Sixth International Conference on Software Engineering and Knowledge Engineering SEKE'94, June 21-23 1994, Jurmala, Latvia*, IEEE Computer Society and Knowledge Systems Institute, Skokie, IL, 1994, pp. 289-297.

Olga Kosheleva, Vladik Kreinovich, "One more potential application of symbolic computations: interval logic", *International Conference on Interval and Computer-Algebraic Methods in Science and Engineering (Interval'94), St. Petersburg, Russia, March 7-10, 1994, Abstracts*, pp. 143-146.

Vladik Kreinovich, "Towards symbolic interval computations: interval rational = algebraic", *International Conference on Interval and Computer-Algebraic Methods in Science and Engineering (Interval'94), St. Petersburg, Russia, March 7-10, 1994, Abstracts*, pp. 152-154.

Andrew Bernat, Elsa Villa, Kishore Bhamidipati, Vladik Kreinovich, “Parallel interval computations as a background problem: when processors come and go”, *International Conference on Interval and Computer-Algebraic Methods in Science and Engineering (Interval’94)*, St. Petersburg, Russia, March 7-10, 1994, *Abstracts*, pp. 51–53.

Benjamin C. Flores, Alberto Ugarte, and Vladik Kreinovich. “Choice of an entropy-like function for range-Doppler processing”, *Proceedings of the SPIE/International Society for Optical Engineering, Vol. 1960, Automatic Object Recognition III*, 1993, pp. 47–56.

Mohamed Amine Khamsi, Vladik Kreinovich, Driss Misane, “A new method of proving the existence of answer sets for disjunctive logic programs: a metric fixed point theorem for multi-valued maps”, *Proceedings of the Workshop on Logic Programming with Incomplete Information*, Vancouver, B.C., Canada, October 1993, pp. 58–73.

Hung T. Nguyen and Vladik Kreinovich. “On approximations of controls by fuzzy systems”. *Fifth International Fuzzy Systems Association World Congress IFSA’93*, Seoul, Korea, July 1993, pp. 1414–1417.

Hung T. Nguyen, Vladik Kreinovich, Dana Tolbert. “On robustness of fuzzy logics”. *Proceedings of the 1993 IEEE International Conference on Fuzzy Systems FUZZ-IEEE’93*, San Francisco, California, March 1993, Vol. 1, pp. 543–547.

Hugh VanLandingham, Apostolos Tsoukkas, Vladik Kreinovich, Chris Quintana. “Nonlinear rescaling of control values simplifies fuzzy control”, *Proceedings of the Third International Workshop on Neural Networks and Fuzzy Logic, Houston, TX, June 1–3, 1992*, NASA, January 1993, Vol. I (NASA Conference Publication No. 10111), pp. 174–182.

Hung T. Nguyen, Vladik Kreinovich, Bob Lea. “How to combine probabilistic and fuzzy uncertainties in fuzzy control”. *Proceedings of the Second International Workshop on Industrial Applications of Fuzzy Control and Intelligent Systems*, College Station, December 2–4, 1992, pp. 117–121.

Arthur Ramer, Vladik Kreinovich. “Maximum entropy approach to fuzzy control”. *Proceedings of the Second International Workshop on Industrial Applications of Fuzzy Control and Intelligent Systems*, College Station, December 2–4, 1992, pp. 113–117.

Hung T. Nguyen, Vladik Kreinovich, Bob Lea, Dana Tolbert. “How to control if even experts are not sure: robust fuzzy control”. *Proceedings of the Second International Workshop on Industrial Applications of Fuzzy Control and Intelligent Systems*, College Station, December 2–4, 1992, pp. 153–162.

Vladik Kreinovich, Ching-Chuang Chang, Leonid Reznik, Gennady N. Solopchenko. “Inverse problems: fuzzy representation of uncertainty generates a regularization”, *Proceedings of NAFIPS’92: North American Fuzzy Information Processing Society Conference, Puerto Vallarta, Mexico, December 15–17, 1992*, NASA Johnson Space Center, Houston, TX, 1992, pp. 418–426.

Vladik Kreinovich, Chris Quintana, Leonid Reznik. “Gaussian membership functions are most adequate in representing uncertainty in measurements”. *Proceedings of NAFIPS’92: North American Fuzzy Information Processing Society Conference, Puerto Vallarta, Mexico, December 15–17, 1992*, NASA Johnson Space Center, Houston, TX, 1992, pp. 618–625.

Andrew Bernat, Luis Cortes, Vladik Kreinovich, Karen Villaverde. “Intelligent parallel simulation – a key to intractable problems of information processing.” *Proceedings of the Twenty-Third Annual Pittsburgh Conference on Modelling and Simulation*, Pittsburgh, PA, 1992, Part 2, pp. 959–969.

Vladik Kreinovich, Robert Lea, Olac Fuentes, and Anatole Lokshin. “Fuzzy control is often better than manual control of the very experts whose knowledge it uses: an explanation”. In: *Proceedings of 1992 IEEE International Conference on Tools with Artificial Intelligence, Arlington, VA, 1992*, IEEE Computer Society Press, Los Alamitos, CA, 1992, pp. 180–185.

Vladik Kreinovich, Andrew Bernat, Elsa Villa, and Yvonne Mariscal. “Parallel computers estimate errors caused by imprecise data”, *Technical Papers of the the Society of Mexican American Engineers and Scientists 1992 National Symposium*, San Antonio, Texas, April 1992, pp. 192–199.

Vladik Kreinovich, Chris Quintana, Robert Lea, Olac Fuentes, Anatole Lokshin, Sundeep Kumar, Inna Boricheva, and Leonid Reznik. “What non-linearity to choose? Mathematical foundations of fuzzy control”, *Proceedings of the 1992 International Conference on Fuzzy Systems and Intelligent Control*, Louisville, KY, 1992, pp. 349–412.

Vladik Kreinovich, Chris Quintana, and Robert Lea. “What procedure to choose while designing a fuzzy control? Towards mathematical foundations of fuzzy control”, *Working Notes of the 1st International Workshop on Industrial Applications of Fuzzy Control and Intelligent Systems*, College Station, TX, 1991, pp. 123–130.

Nilesh Nabar, Carlos Ferregut, and Vladik Kreinovich. “Methodology that combines neural and analytical models and its application to composite materials”, *Proceedings of the International AMSE Conference “Signals, Data & Systems”*, December 9–11, 1991, New Delhi, India, 1991, AMSE Press, Vol. 4, pp. 149–160.

Vladik Kreinovich and Chris Quintana. “Neural networks: what non-linearity to choose?,” *Proceedings of the 4th University of New Brunswick Artificial Intelligence Workshop*, Fredericton, N.B., Canada, 1991, pp. 627–637.

Vladik Kreinovich and Bassam A. Chokr. “How far are we from the complete knowledge: complexity of knowledge acquisition in Dempster-Shafer approach,” *Proceedings of the 4th University of New Brunswick Artificial Intelligence Workshop*, Fredericton, N.B., Canada, 1991, pp. 551–561.

Vladik Kreinovich and L. Olac Fuentes. “Simulation of chemical kinetics - a promising approach to inference engines,” in: J. Liebowitz (ed.), *Proceedings of the World Congress on Expert Systems, Orlando, Florida, 1991*, Pergamon Press, N.Y., Vol. 3, pp. 1510–1517.

Vladik Kreinovich, Andrew Bernat, Elsa Villa and Yvonne Mariscal. "Parallel computers estimate errors caused by imprecise data," *Proceedings of the Fourth ISMM (International Society on Mini and Micro Computers) International Conference on Parallel and Distributed Computing and Systems*, Washington, 1991, Vol. 1, pp. 386–390.

Vladik Kreinovich and Sundeep Kumar. "Optimal choice of $\&$ - and \vee -operations for expert values," *Proceedings of the 3rd University of New Brunswick Artificial Intelligence Workshop, Fredericton, N.B., Canada, 1990*, pp. 169–178.

Vladik Kreinovich and Leonid K. Reznik, "Prospectives of using expert systems in intelligent measuring devices", *Proceedings of the Workshop on Aspects of Intelligent Measurement, Sochi, USSR, 20–30 October, 1989* (in Russian).

Vladik Kreinovich. "Group-theoretic approach to intractable problems," *Proceedings of International Conference on Computer Logic COLOG-88, Tallinn, 1988*, Vol. 1, pp. 31–42.

Vladik Kreinovich. "How to describe certainty values: an axiomatic approach," *Proceedings of the Conference on Semiotic Aspects of Formalizing Intelligent Activity, Borzhomi-88, Moscow, 1988*, pp. 141–145 (in Russian).

Andrei M. Finkelstein and Vladik Kreinovich. "Impossibility of hardly possible events: physical consequences," *Abstracts of the 8th International Congress on Logic, Methodology and Philosophy of Science*, Moscow, 1987, Vol. 5, Pt. 2, pp. 25–27.

Wayne H. Cannon, D. Lisewski, Andrei M. Finkelstein, and Vladik Kreinovich. "Relativistic effects in Earth based and cosmic long baseline interferometry," *Proceedings of the IAU Symposium 114 "Relativity in Celestial Mechanics and Astrometry"*, Reidel, Dordrecht-Boston-Lancaster-Tokyo, 1986, pp. 255–268.

Vladik Kreinovich and Andrei M. Finkelstein. "Perspectives of using personal computers when solving creative problems in physics," *Proceedings of the Conference "Dialogue on personal computers" IVERSI-85, Tbilisi, 1985*, 4 pp. (in Russian).

Vladik Kreinovich and Andrei M. Finkelstein. "Formalization of various methods of solving creative problems in physics," *Proceedings of the Conference on Semiotic Aspects of Formalizing Intelligent Activity, Kutaisi-85, Moscow, 1985*, pp. 146–149 (in Russian).

Andrei M. Finkelstein and Vladik Kreinovich. "Derivation of Einstein's, Brans-Dicke and other equations from group considerations," *On Relativity Theory. Proceedings of the Sir Arthur Eddington Centenary Symposium, Nagpur India 1984*, Vol. 2, Choque-Bruhat, Y.; Karade, T. M. (eds), World Scientific, Singapore, 1985, pp. 138–146.

Vladik Kreinovich and Gennady N. Solopchenko. "Robust methods for correcting errors (in dynamical regime) and for solving identification equations," *Proceedings of the 4th National Symposium on Dynamical Measurements*, Leningrad, 1984, pp. 67–70 (in Russian).

Vladik Kreinovich and Andrei M. Finkelstein. “Relativistic corrections for very long baseline measurements of sources coordinates,” *Problems of Modern Astrometry: Designing an Inertial Coordinate System, Proceedings of the 21th National Astrometric Conference, Tashkent*, Fan Publishers, 1981, pp. 287–292 (in Russian).

Alexander Dravskikh, Andrei M. Finkelstein and Vladik Kreinovich. “Astrometric and geodetic applications of VLBI “arc method”,” *Modern Astrometry, Proceedings of the IAU Colloquium No. 48, Vienna, 1978*, pp. 143–153.

Vladik Kreinovich. “Applying Wiener measure to calculations,” *Proceedings of the 3rd Leningrad Conference of Young Mathematicians, Leningrad University, 1974*, pp. 6–9 (in Russian).

Research Reports

Vladik Kreinovich, Janos G. Hajagos, W. Troy Tucker, Lev R. Ginzburg, and Scott Ferson, *Propagating uncertainty through a quadratic response surface model*, Sandia National Laboratories, Report SAND2008-5983, November 2008.

Ruey (Kelvin) Cheu, Vladik Kreinovich, Yi-Chang Chiu, Rong Pan, Gang Xiang, Sanjay V. Bhupathiraju, and Srinavasa Rao Manduva, *Strategies for Improving Travel Time Reliability*, Texas Department of Transportation, Research Report 0-5453-R2, August 2007.

Scott Ferson, Vladik Kreinovich, Janos Hajagos, William Oberkampf, and Lev Ginzburg, *Experimental Uncertainty Estimation and Statistics for Data Having Interval Uncertainty*, Sandia National Laboratories, Report SAND2007-0939, May 2007.

Vladik Kreinovich, “Interval approach”, In: *Proceedings of the Los Alamos National Laboratory (LANL) Uncertainty Quantification Workshop*, Los Alamos, New Mexico, June 6–7, 2006, Technical Report LA-UR-05-8071, November 2005, pp. 320–353.

Ronald R. Yager and Vladik Kreinovich, *Entropy Conserving Probability Transforms and the Entailment Principle*, Iona College, Machine Intelligence Institute, Technical Report MII-2518, September 2005.

Vladik Kreinovich, Graçaliz P. Dimuro, and Antônio Carlos da Rocha Costa, *From Intervals to? Towards a General Description of Validated Uncertainty*, Catholic University of Pelotas, Brazil, Technical Report, January 2004.

Scott Ferson, Vladik Kreinovich, Lev Ginzburg, David S. Myers, and Kari Sentz, *Constructing Probability Boxes and Dempster-Shafer Structures*, Sandia National Laboratories, Report SAND2002-4015, January 2003.

Cliff Joslyn and Vladik Kreinovich, *Convergence properties of an interval probabilistic approach to system reliability estimation*, Los Alamos National Laboratory, Technical Report LA-UR-02-6261, Los Alamos, NM, 2002.

Masao Mukaidono, Yeung Yam, and Vladik Kreinovich, “Intervals is All We Need: An Argument”, *The Chinese University of Hong Kong, Department of Mechanical & Automation Engineering*, Technical Report CUHK-MAE-99-005, January 1999.

Masao Mukaidono, Yeung Yam, and Vladik Kreinovich, “Beyond $[0,1]$ to Intervals and Further: Do We Need All New Fuzzy Values?”, *The Chinese University of Hong Kong, Department of Mechanical & Automation Engineering*, Technical Report CUHK-MAE-99-004, January 1999.

Vladik Kreinovich, Hung T. Nguyen, and Yeung Yam, “Fuzzy Systems Are Universal Approximators for a Smooth Function And Its Derivatives”, *The Chinese University of Hong Kong, Department of Mechanical & Automation Engineering*, Technical Report CUHK-MAE-99-002, January 1999.

Vladik Kreinovich and Yeung Yam, “Why Clustering in Function Approximation? Theoretical Explanation”, *The Chinese University of Hong Kong, Department of Mechanical & Automation Engineering*, Technical Report CUHK-MAE-99-001, January 1999.

Núria Mata and Vladik Kreinovich, “NP-Hardness In Geometric Construction Problems With One Interval Parameter”, *Universitat Politècnica de Catalunya, Departament de Llenguatges i Sistemes Informàtics Barcelona, Spain*, Technical Report No. LSI-98-55-R, November 1998.

Vladik Kreinovich, Hung T. Nguyen, and Yeung Yam, “Optimal Choices of Potential Functions in Fuzzy Clustering”, *The Chinese University of Hong Kong, Department of Mechanical & Automation Engineering*, Technical Report CUHK-MAE-98-001, January 1998.

Olga Kosheleva and Vladik Kreinovich, *Error estimation for indirect measurements: Interval computation problem is (slightly) harder than a similar probabilistic computational problem*, *Université Paris VI et VII, Institut Blaise Pascal, Laboratoire Formes et Intelligence Artificielle LAFORIA*, Technical Report 96/24, September 1996.

Vladik Kreinovich, “S. Maslov’s Iterative Method: 15 Years Later (Freedom of Choice, Neural Networks, Numerical Optimization, Uncertainty Reasoning, and Chemical Computing)”, *Université Paris VI et VII, Institut Blaise Pascal, Laboratoire Formes et Intelligence Artificielle LAFORIA*, Technical Report 96/23, September 1996.

Brian Cloteaux, Cristophe Eick, Vladik Kreinovich, and Bernadette Bouchon-Meunier, “From Ordered Beliefs to Numbers: How to Elicit Numbers Without Asking for Them (Doable but Computationally Difficult)”, *Université Paris VI et VII, Institut Blaise Pascal, Laboratoire Formes et Intelligence Artificielle LAFORIA*, Technical Report 96/20, June 1996.

Bernadette Bouchon-Meunier, Vladik Kreinovich, Anatole Lokshin, and Hung T. Nguyen, “On the formulation of optimization under elastic constraints (with control in mind)”, *Université Paris VI et VII, Institut Blaise Pascal, Laboratoire Formes et Intelligence Artificielle LAFORIA*, Technical Report 94/19, October 1994.

Andrew Bernat, Vladik Kreinovich, Sivakumar Natarajan, Ongard Sirisaengtaksin, Elsa Villa, “Fast polynomial algorithms that use expert error estimates for sensors

to estimate the error of an indirect measurement”, *Center for Fuzzy Logic and Intelligent Systems Research*, Texas A&M University, Technical Report CFL-93-005, July 1993, 18 pp.

Vladik Kreinovich. “Main and max are the only continuous $\&$ -, \vee -operations for finite logics”, *Center for Fuzzy Logic and Intelligent Systems Research*, Texas A&M University, Technical Report CFL-93-003, January 1993, 11 pp.

Vladik Kreinovich. “Fast parallel algorithms that compute transitive closure of a fuzzy relation”, *Center for Fuzzy Logic and Intelligent Systems Research*, Texas A&M University, Technical Report CFL-93-001, January 1993, 8 pp.

Hung T. Nguyen and Vladik Kreinovich, *On approximation of controls by fuzzy systems*, Technical Report 92-93/302, LIFE Chair of Fuzzy Theory, Tokyo Institute of Technology, 1992.

Olga M. Kosheleva, Vladik Kreinovich. “A Hierarchic Analog of von Neumann-Morgenstern Solution Always Exists” *Pool -Listing Service in Game Theory, Institute of Mathematical Economics, Bielefeld, Germany*, December 1990, Report No. 90- -26.

Vladik Kreinovich. “Paradoxes of Love: Game-Theoretic Explanation”. *Pool-Listing Service in Game Theory, Institute of Mathematical Economics, Bielefeld, Germany*, September 1990, Report No. 90-16.

Olga M. Kosheleva, Vladik Kreinovich, and Karen Villaverde. “A Polynomial-Time Algorithm for Calculating the Shapley Vector (Monte-Carlo Method),” *Pool - Listing Service in Game Theory, Institute of Mathematical Economics, Bielefeld, Germany*, September 1990, Report No. 90-18.

Andrei M. Finkelstein and Vladik Kreinovich. “Formal models of nonformalizable reasoning: applications to computer science,” *University of Bari, Italy, Department of Philosophy*, Technical Report No. 7, 1989, 9 pp.

Vladik Kreinovich, A. E. Yurzditsky, “Analysis of the existing expert systems for the instruments automation and designing new expert system shells for that purpose. ”, Preliminary Report 1.1. for Grant No. 7550-9241-40 from the Soviet Science Foundation, *USSR National Institute for Electrical Measuring Instruments, Leningrad*, 1989, 210 pp. (in Russian).

Alexander M. Gelfand, I. Novikov, Vladik Kreinovich, et al. “Precision characteristics for the results of processing the measured data by automatized systems: main principles,” *Central Research and Development Institute of Complex Automation, Moscow*, 1989, 8 pp. (in Russian).

Andrei M. Finkelstein and Vladik Kreinovich. “On Cauchy problem in scalar-tensor theory of gravitation,” *Special Astrophysical Observatory, Leningrad, Technical Report No. 50L*, 1988, 8 pp.

Andrei M. Finkelstein and Vladik Kreinovich. “Newtonian interpretation of harmonic coordinates in static spaces of general relativity”, *Special Astrophysical Observatory, Leningrad, Technical Report No. 18L*, 1985, 7 pp. (in Russian).

Vitaly Kozlenko, Vladik Kreinovich, and Gennady N. Solopchenko. “A method for solving ill-defined problems,” *Leningrad Center of Scientific and Technical Information*, Leningrad, Technical Report No. 1067, 1984, 2 pp. (in Russian).

Vitaly Kozlenko, Vladik Kreinovich, and Boris A. Litov. “A method of processing the contradictory experts’ statements,” *Leningrad Center of Scientific and Technical Information*, Leningrad, Technical Report No. 1071, 1984, 2 pp. (in Russian)

Olga M. Kosheleva and Vladik Kreinovich. “On the problem of measurement in quantum mechanics,” *Research Reports in Philosophy of Physics, University of Toronto, Ontario, Canada, Department of Philosophy*, No. 6, 1979, 15 pp.

Piet G. Vroegindeweij, Vladik Kreinovich, and Olga Kosheleva. “Note on a physical application of the main theorem of chronogeometry,” *Technological University, Eindhoven, Netherlands*, 1979, 7 pp.

Olga M. Kosheleva and Vladik Kreinovich. “On the Algorithmic Problems of a Measurement Process,” *Research Reports in Philosophy of Physics, University of Toronto, Ontario, Canada, Department of Philosophy*, No. 5, 1978, 63 pp.

Olga M. Kosheleva and Vladik Kreinovich. “Derivation of the probabilistic character of physics from fundamental assumptions,” *Research Notes in Philosophy of Physics, University of British Columbia*, No. 4, 1978, 5 pp.

Olga M. Kosheleva and Vladik Kreinovich. “A strengthening of a theorem by Kochen and Specker,” *Research Notes in Philosophy of Physics, University of British Columbia*, No. 3, 1978, 2 pp.

Olga M. Kosheleva and Vladik Kreinovich. “Algebraic analysis of the notions of elementary and composite particles,” *Research Notes in Philosophy of Physics, University of British Columbia*, No. 2, 1978, 4 pp.

Olga M. Kosheleva and Vladik Kreinovich. “Prime ideal theorem and the problem of completeness of a physical theory,” *Research Notes in Philosophy of Physics, University of British Columbia*, No. 1, 1978, 4 pp.

Yuri B. Rumer and Vladik Kreinovich, “Weak waves of curvature in Einstein’s theory of gravitation”, *Soviet Academy of Sciences, Siberian Branch, Institute of Nuclear Physics, Technical Report No. 77-31*, Novosibirsk, 1977, 19 pp. (in Russian).

Nikolai Gromov, Vladik Kreinovich, and Revolt I. Pimenov. “Curves in kinematic spaces and relevant problems of physics and cosmology,” *Soviet Academy of Sciences, Komi Branch Technical Report No. 22*, Syktyvkar, 1976 (in Russian).

Personalia

Bernadette Bouchon-Meunier and Vladik Kreinovich, “Dialogue”, *Mathware and Soft Computing Magazine*, 2016, Vol. 23, No. 1, pp. 5–11.

Vladik Kreinovich, “Science is winning: recollections about the ‘Boldino Autumn’”, In: David Epstein, Yakov Shapiro, and S. Ivanov (eds.), *Mathematics Department of St. Petersburg University*, St. Petersburg, Russia, 2013, pp. 324–329 (in Russian).

Vladik Kreinovich, “His happiness was contagious”, In: Irina Perchenok, Marina Perchenok, and Elena Yakushkina (eds.), *Our Book about Felix: recollections about Felix Pechenok*, Heavy Advance Publ., St. Petersburg, Russia, 2011, pp. 294–296 (in Russian).

Vladik Kreinovich, “Mathematics Department: recollections from afar”, In: David Epstein, Yakov Shapiro, and S. Ivanov (eds.), *Mathematics Department of St. Petersburg University*, St. Petersburg, Russia, 2011, pp. 164–178 (in Russian).

Vladik Kreinovich, “Recollections about S. Yu. Maslov”, In: David Epstein, Yakov Shapiro, and S. Ivanov (eds.), *Mathematics Department of St. Petersburg University*, St. Petersburg, Russia, 2011, pp. 148–152 (in Russian).

Vladik Kreinovich, “Chronogeometry seminar after 1974”, In: A. K. Guts, *Chronogeometry: Axiomatic Relativity Theory*, Omsk University Press, Omsk, 2008, pp. 283–290 (in Russian).

Vladik Kreinovich, “Larger than life”, In: Grigori Moiseevich Idlis and Olga A. Ladyzhenskaya, (eds.), *A. D. Alexandrov*, Moscow, Nauka Publ., 2002, pp. 122–124 (in Russian); English translation to appear in *Siberian Electronic Mathematical Reports*.

Supervised Theses and Dissertations

Totally, 67 students received their Master's Degree under my supervision, and 12 students received their Ph.D.

Master's Degrees

- 2016 Andrzej Pownuk, "Combining Interval and Probabilistic Uncertainty in Engineering Applications", University of Texas at El Paso.
- 2014 Leonardo Octavio Lerma, "Towards analytical techniques for optimizing knowledge acquisition, processing, propagation, and use in cyberinfrastructure", University of Texas at El Paso.
- 2013 Omar Ochoa, "Model Fusion: A New Approach to Processing Heterogenous Data", University of Texas at El Paso.
- 2012 Christian Servin, "Propagation Of Interval and Probabilistic Uncertainty in Cyberinfrastructure-Related Data Processing and Data Fusion", University of Texas at El Paso.
- 2011 Ali Jalal-Kamali, "Estimating Statistical Characteristics Under Interval Uncertainty and Constraints: Mean, Variance, Covariance, and Correlation", University of Texas at El Paso.
- 2009 Jaime Nava, "Towards More Reliable Extrapolation Algorithms, with Applications to Organic Chemistry", University of Texas at El Paso.
- 2007 Gilbert Ornelas, "Set-Valued Extensions of Fuzzy Logic: Classification Theorems", University of Texas at El Paso.
- 2007 J. Ivan Vargas, "Fast Algorithms for Computing Odd Moments in Statistical Analysis of Privacy-Related Interval Data", University of Texas at El Paso.
- 2005 Sanjeev Chopra, "Affine arithmetic-type techniques for handling uncertainty in expert systems", University of Texas at El Paso.
- 2004 Asis Nayak, "Outlier detection under interval uncertainty in privacy-protected statistical databases", Master Project, University of Texas at El Paso.
- 2004 Raj Kandathi, "Estimating Covariance under Interval Uncertainty in Privacy-Protected Statistical Databases", University of Texas at El Paso.
- 2004 Kavitha Tupelly, "Checking if There Exists a Monotonic Function that is Consistent with the Measurement Results", University of Texas at El Paso.

- 2004 Joseph E. Adidhela, “Using FFT-based Data Processing Techniques to Characterize Asphaltic Concrete Mixtures”, University of Texas at El Paso.
- 2004 Dong Zhang, “Optimality under Uncertainty and its Application to Automatic Non-Destructive Testing of Concrete”, University of Texas at El Paso.
- 2003 Roberto Araiza, “Optimal FFT-Based Algorithms for Referencing Multi-Spectral Images”, University of Texas at El Paso.
- 2003 Roberto Torres, “Eliminating Duplicates under Interval and Fuzzy Uncertainty: An Asymptotically Optimal Algorithm and its Geospatial Applications”, University of Texas at El Paso.
- 2003 Praveen Patangay, “Outlier Detection Under Interval Uncertainty: Algorithmic Solvability and Computational Complexity”, University of Texas at El Paso.
- 2003 Sanjaya Das, “Search engines for XML-based websites”, University of Texas at El Paso.
- 2002 Sreenath Srikrishnan, “Referencing noisy images: complexity of the problem, analysis and efficient implementation of the Fast Fourier approach”, University of Texas at El Paso.
- 2002 Bharat C. Mulupuru, “Differentiating between angular and smooth shapes in noisy computer images, on the example of non-destructive testing of aerospace structures”, University of Texas at El Paso.
- 2002 Jesus Martinez, “Towards more realistic (e.g. non-associative) “and”– and “or”– operations in fuzzy logic”, University of Texas at El Paso.
- 2002 Kiran Patel, “Non-Binary fuzzy logical operations: why they are needed in expert systems and how they are related to traditional binary logic”, University of Texas at El Paso.
- 2002 Seetharami R. Seelam, “Intelligent outlier detection and information fusion methods for noisy images, with applications to structural integrity of aerospace structures”, University of Texas at El Paso.
- 2002 Rajesh Saini, “Kolmogorov complexity for probabilistic computations: towards resource bounded Kolmogorov complexity for quantum computing”, University of Texas at El Paso.
- 2002 Lakshmi Potluri, “Correlation techniques for information fusion”, University of Texas at El Paso.
- 2001 Jan Beck, “An optimal combination of interval computations and traditional linearization, with an application to gravity databases”, University of Texas at El Paso.

- 2000 Su Wang, "A new method of selecting the optimal neural network and its application to non-destructive evaluation of pavements", University of Texas at El Paso.
- 2000 Ivette Sierra, "Geometric foundations for the uniqueness of the FFT-based image mosaicking, with the application to detecting hidden text in web images", University of Texas at El Paso.
- 2000 Yohans Mendoza, "Towards mathematical foundations of information retrieval with application to fault detection in aerospace structures", University of Texas at El Paso.
- 1999 Murali Krishna, "Using symmetries to reduce the size of a fuzzy knowledge base, with an application to fault detection", University of Texas at El Paso.
- 1999 Steve Gibson, "An optimal FFT-based algorithm for mosaicking images", University of Texas at El Paso.
- 1999 Martin Schmidt, "Detecting text in web images: a complexity-based approach", University of Texas at El Paso.
- 1998 Zhibao Hu, "Best segments in representing contours", University of Texas at El Paso.
- 1998 Emilio Sanchez, "A modified learning algorithm that prevents instability frequently found in FIR back-propagation neural networks", University of Texas at El Paso.
- 1996 Brian Cloteaux, "On the Computational Power of Using Chemical Reactions", University of Texas at El Paso.
- 1996 Patrick Kahl, "Solving Narrow-Interval Linear Equation Systems Is NP-Hard", University of Texas at El Paso.
- 1996 Leticia Chee, "Computing the Value of a Boolean expression with intervals is NP-hard", University of Texas at El Paso.
- 1995 Manoranjan Baral, "Incorporating deadlines in Internet message traffic", University of Texas at El Paso.
- 1994 Srinandan Hullahalli, "Why fractionally linear formulas work well in adaptive fuzzy control?", University of Texas at El Paso.
- 1994 Raul Antonio Trejo Ramirez, "An improved rating system: its foundations and computational problems", University of Texas at El Paso.
- 1994 Luis Alfredo Cortes. "Calculating belief probabilities and intervals", University of Texas at El Paso.

- 1994 Nancy Strickland. "What can we compute if we use computational devices based on non-Newtonian physical phenomena: Church's thesis revisited", University of Texas at El Paso.
- 1994 Dana Tolbert. "Finding 'and' and 'or' operations that are least sensitive to change in intelligent control", University of Texas at El Paso.
- 1993 Sridharan Thamocharan. "Prediction paradox: neural network – a possible application to the economic prediction", University of Texas at El Paso.
- 1993 Navdeep Singh Chadha. "Computer vision and fractal dimension", University of Texas at El Paso.
- 1993 Devanand Addagatla. "How to train a space-time neural network: backpropagation approach", *Master Project*, University of Texas at El Paso.
- 1993 Karen Villaverde. "Linear-time algorithm that locates local maxima and minima of a function from given approximate measurement results", University of Texas at El Paso.
- 1993 Carlos Sandoval. "A modified learning algorithm for backpropagation networks", University of Texas at El Paso.
- 1993 Ricardo Diaz. "Maxneuron neural networks." University of Texas at El Paso.
- 1993 Joseph Lorkowski. "Analysis of the properties of a function based on approximate measurement results using semantic domains and interval methods." University of Texas at El Paso.
- 1993 Julio Peña. "Fast rotation of a 3D image about an arbitrary line." University of Texas at El Paso.
- 1993 Nitin Nilkanth Okade. "A real time algorithm for fractal analysis and its application to an early detection of epileptic seizures." University of Texas at El Paso.
- 1993 Sunil Kamat. "Efficient spare allocation for restructurable VLSI RAM chips." University of Texas at El Paso.
- 1992 Prakash Narasimhamurthy. "Application of intelligent control to congestion in computer networks". University of Texas at El Paso.
- 1992 Sukanya Krishnamurthy. "Robust statistical methods in computer vision", University of Texas at El Paso.
- 1992 Ketan Shah. "A fractionally linear method to decrease window size in the case of congestion in computer networks", University of Texas at El Paso.

- 1992 Ching-Chuan Chang. "Fast algorithm that estimates the precision of indirect measurements", *Master Project*, University of Texas at El Paso.
- 1992 Liz Kamoroff. "How to extract knowledge from an expert so that his effort is minimal", *Master Project*, University of Texas at El Paso.
- 1992 Chi-Cheng Chang. "Comparison of different fuzzy control algorithms based on computer simulation of car back-parking problem", University of Texas at El Paso.
- 1992 Monu Pradhan-Advani. "Catastrophe theory and congestion in computer networks", University of Texas at El Paso.
- 1991 Jaswinder Singh Chadha. "An automated system for inspection of solder joints using machine vision", University of Texas at El Paso.
- 1991 Nilesh Nabar. "Methodology that combines neural and analytical models and its application to composite materials", University of Texas at El Paso.
- 1991 Dharmendran Rajendran. "Application of discrete optimization techniques to the diagnostics of industrial systems", University of Texas at El Paso.
- 1991 Luis Olac Fuentes. "Applying uncertainty formalisms to well- defined problems: experimental and theoretical foundations", University of Texas at El Paso.
- 1988 Sergei Shukeilo. "A new probabilistic approach to the knapsack problem", Leningrad Electrotechnical Institute.
- 1987 Vera P. Pytchenko. "Estimating dynamic errors: general methods; applications to the new superprecise computer-controlled laser-based National temperature standard", Leningrad Polytechnical Institute.
- 1983 Roman R. Zapatrin. "Equivalence principle in the presence of physical fields: precise mathematical formalization, applications to the problem of choosing equations in curved space-time", Leningrad University.
- 1981 Tatiana Medvedeva. "Mathematical formalization of heuristic geometric methods of physics", Leningrad University.
- 1981 Svetlana Koshnyakova. "Algorithms of local differential geometry", Leningrad University.

Ph.D. Degree Students

- 2015 Joseph A. “Joe” Lorkowski, “Bounded Rationality in Decision Making Under Uncertainty: Towards Optimal Granularity”, Department of Computer Science, University of Texas at El Paso.
- 2015 Leonardo Octavio Lerma, “Towards Analytical Techniques for Optimizing Knowledge Acquisition, Processing, Propagation, and Use in Cyberinfrastructure”, Computational Science Program, University of Texas at El Paso.
- 2013 Christian Servin, “Propagation of Interval and Probabilistic Uncertainty in Cyberinfrastructure-Related Data Processing and Data Fusion”, Computational Science Program, University of Texas at El Paso.
- 2013 Melaku Bogale, “Modeling The Human Gait Phases Using Granular Computing”, Computational Science Program, University of Texas at El Paso (PhD Committee Co-Chair with Thompson Sarkodie-Gyan)
- 2012 Francisco Zapata, “Partial Orders for Representing Uncertainty, Causality, and Decision Making: General Properties, Operations, and Algorithms”, Department of Computer Science, University of Texas at El Paso.
- 2012 Jaime Nava, “Algorithmic Aspects of Analysis, Prediction, and Control in Science and Engineering: Symmetry-Based Approach”, Department of Computer Science, University of Texas at El Paso.
- 2007 Roberto Araiza, “The Use of Interval-Related Expert Knowledge in Processing 2D and 3D Data, with an Emphasis on Applications to Geosciences and Biosciences”, Department of Computer Science, University of Texas at El Paso.
- 2007 Gang Xiang, “Fast Algorithms for Computing Statistics under Interval Uncertainty, with Applications to Computer Science and to Electrical and Computer Engineering”, Department of Computer Science, University of Texas at El Paso.
- 2004 Jan Beck, “Data Processing under a Combination of Interval and Probabilistic Uncertainty and Its Application to Earth and Environmental Studies and Engineering”, Department of Computer Science, University of Texas at El Paso.
- 2003 Fariba Ansari, “Determination of dynamic elastic constants of transversely isotropic materials using computer programs”, Material Science Program, University of Texas at El Paso.
- 2001 Raúl A. Trejo, “Interval computation methods and probabilistic methods for planning and plan checking under uncertainty and incomplete information”, Department of Computer Science, University of Texas at El Paso.

1988

Inna S. Kirillova. "Optimal robust algorithms for processing the measurements results in case of a priori uncertainty". Degree awarded at the meeting of the professors of the National Institute for Electromasuring Devices, Leningrad Polytechnical Institute and Leningrad Electrotechnical Institute (These are the Leningrad Technical Universities); approved by the special meeting of the National Dissertation Committee, Moscow, USSR.

Grants

- 2012–18 “CREST Phase II – Cyber-ShARE Center of Excellence: A center for sharing cyberresources to advance science and education”,
National Science Foundation,
\$4,999,439,
co-Principal Investigator.
- 2016 “UTEP and Prudential Actuarial Science Academy and Pipeline Initiative”
Prudential Foundation,\$200,000,
co-Principal Investigator.
- 2009–16 “UBM – Institutional Undergraduate Training in Bioinformatics”,
National Science Foundation,
\$879,000,
co-Principal Investigator.
- 2012–13 “F-transform - A New Promising Technique for Image and Signal Processing: How to Make Its Applications More Reliable”,
Office of Naval Research,
\$75,000,
co-Principal Investigator.
- 2008–13 “Enhancement of Qualitative Science in Biology Curricula”,
National Institutes of Health,
\$1,291,697,
co-Principal Investigator.
- 2007–12 “CREST Cyber-ShARE Center of Excellence: A center for sharing cyberresources to advance science and education”,
National Science Foundation,
\$4,999,889,
co-Principal Investigator.
- 2009–11 “Application of fuzzy logic with operators in the knowledge based systems”,
Science and Technology Centre in Ukraine (STCU), funded by European Union,
EUR 25,260,
Collaborator.
- 2002–07 “ITR Collaborative Research: GEON: A Research Project to Create Cyberinfrastructure for the Geosciences”,
National Science Foundation,
\$892,437,
co-Principal Investigator.
- 2005–07 “Strategies for Improving Travel Time Reliability”,
Texas Department of Transportation,
\$200,000,
co-Principal Investigator.

- 2006–07 “Finite Element Methods in Science and Engineering”,
National Science Foundation,
\$13,220,
co-Principal Investigator.
- 2005–06 “High Assurance Systems Infrastructure”,
Star Award from the University of Texas System,
\$465,000,
co-Principal Investigator.
- 2005–06 “Stochastic Process Inversion Through Radar Receiver Components”
Army Research Lab,
\$20,000,
Principal Investigator.
- 1999–2006 “Pan American Center for Earth and Environmental Studies (PACES)”,
National Aeronautic and Space Administration,
\$6,000,000,
co-Principal Investigator.
- 2004–05 “Enhancement of Computational Biology Curricula”
National Institutes of Health,
\$50,000,
co-Principal Investigator.
- 2003–04 “New Physical-Statistical Methods and Models for Clutter”
Army Research Lab,
\$27,000,
co-Principal Investigator.
- 2003–04 “Titanium 2 Equipment Grant”,
Hewlett-Packard,
\$94,685,
co-Principal Investigator.
- 2001–04 “Creation of a Geospatial Data System for the Transition Zone Between the Col-
orado Plateau and Basin & Range Provinces (Geoinformatics in Action)”,
National Science Foundation,
\$400,000,
co-Principal Investigator.
- 2000–04 “Lamb Wave Scanning and Intelligent NDE Wide Area Aircraft Inspections”,
Air Force Office of Sponsored Research AFOSR,
\$300,000,
co-Principal Investigator.
- 2003–04 “Acquisition of Equipment to Support Collaboration, Multi-Disciplinary Research
and Development of Reliable Software”,

- National Science Foundation,
\$163,793,
co-Principal Investigator.
- 2003 “Personal Interface AccessGrid”,
Education, Outreach and Training Partnership for Advanced Computational In-
frastructure EOT-PACI
\$5,199.41.
- 2003 “SC2003 Minority Serving Institutions Participation Grant”, IEEE and ACM
\$1,400.
- 2002–03 “Development of Methodology to Characterize the Response of Military Systems
to Battlefield Threats”,
Army Research Lab,
\$40,000,
Principal Investigator.
- 2002 “SC2002 Minority Serving Institutions Participation Grant”, IEEE and ACM
\$1,200.
- 2001–02 “Agent development and complex plan verification under uncertainty using declar-
ative programming”,
National Aeronautic and Space Administration,
\$150,000,
co-Principal Investigator.
- 2001 “SC2001 Minority Serving Institutions Participation Grant”, IEEE and ACM
\$1,410.
- 2001 “Current trends in soft computing”,
U.S.-Czech Science and Technology Joint Fund,
\$7,920
co-Principal Investigator.
- 1998–2000 “The SequenceL language and data mining”,
National Security Agency,
\$98,413,
Principal Investigator.
- 1998–2000 “USA Training Technology Consortium and Dual Use Academic Liaison Program”,
United Space Alliance,
\$5,000,
Principal Investigator.
- 1997–2000 “Interval Computation and Maximum Entropy Methods”,
United Space Alliance,
\$9,599,
Principal Investigator.

- 1997–2000 “Reasoning about Actions and Plans”,
United Space Alliance,
\$68,608,
Principal Investigator.
- 1997–2000 “An Undergraduate Laboratory for Building and Programming Mobile Robots”,
National Science Foundation,
\$40,000,
co-Principal Investigator.
- 1998–99 “Detection of text images in web pages”,
National Security Agency,
\$101,293,
co-Principal Investigator.
- 1994–97 “Electrical Engineering and Computer Science Projects to Support Research
at the National Solar Observatory”,
National Science Foundation,
\$39,670,
co-Principal Investigator.
- 1994–96 “Intelligent control: which algorithm to choose”,
National Aeronautic and Space Administration,
\$62,326,
Principal Investigator.
- 1993–94 “Towards combined methods of processing uncertainty
in intelligent control systems”,
National Science Foundation,
\$10,000.00,
co-Principal Investigator.
- 1990–95 “A center for excellence for Computer Science Education and Research”,
National Science Foundation,
\$1,543,192,
co-Principal Investigator.
- 1991–92 “Towards a new generation of machine vision inspection systems:
combining statistical and expert system approaches”,
A grant from the *General Services Administration*
administered by the *Institute for Manufacturing and Materials Management*,
\$57,967,
co-Principal Investigator.
- 1990–92 “Uncertainty reasoning in expert systems”,
National Aeronautic and Space Administration,
\$62,326,
Principal Investigator/Project Director.

- 1989 Invited to Stanford University as a co-investigator on the *McCarthy Foundation* grant on the analysis of relations between Philosophy and Artificial Intelligence.
- 1989 “Analysis of the existing expert systems for the instruments automation and designing new expert system shells for that purpose”,
Grant No. 7550-9241-40 from the *Soviet Science Foundation*,
Principal Investigator.
- 1988–89 “Designing the methods that use a priori knowledge about the objects to increase precision and reliability of measurement results”,
Grant No. 7550-8180-40 from the *Soviet Science Foundation*,
Principal Investigator.
- 1988–89 “Theoretical foundations for estimating numerical precision of software in intellectual systems for control and measurement”,
Grant No. 7550-8170-40 from the *Soviet Science Foundation*,
Principal Investigator.
- 1988–89 “Standardizing the precision characteristics for software used in control and measurement”,
Grant from the *Soviet National Bureau of Standards*,
co-Principal Investigator.
- 1988–89 “A computer-based real-time system for data acquisition and processing in marine geology”,
Grant from the *Soviet Ministry of Geology*,
co-Principal Investigator.
- 1988–89 “A knowledge-based navigation system”,
Grant from the *Soviet Ministry of Marine Industry and National Bureau of Cartography and Geodesy, Soviet Ministry of Defense*,
co-Principal Investigator.
- 1987–88 “Metrological principles for the multifunctional multiprocessor-based measuring instruments, that measure alternating current by measuring its instant values”,
Grant No. 7550-8198-40 from the *Soviet Science Foundation*,
co-Principal Investigator.
- 1986–87 “Metrological standardization of the digital algorithms used in control and measuring systems”,
Grant No. 7550-6627-40 from the *Soviet Science Foundation*,
Principal Investigator.
- 1986–87 “Methods of designing hardware for filtering and errors correction for dynamical measuring systems”,
Grant No. 2470-6117-13 from the *Soviet Science Foundation*,
co-Principal Investigator.

- 1986–87 “Analysis of the present state of metrology in instruments industry and possible methods of its improvement”,
Grant No. 2470-6107-13 from the *Soviet Ministry of Defense* and *Soviet Science Foundation*,
co-Principal Investigator.
- 1985–86 “Metrological analysis of the algorithms, that process the measured information and take into consideration the a priori knowledge about the measured object”,
Grant No. 0471-5226-40 from the *Soviet Science Foundation*,
co-Principal Investigator.
- 1984–86 “Methods of correcting the errors of dynamic measurements”,
Grants No. 0471-4225-40 and 0471-5226-40 from the *Soviet Science Foundation*,
co-Principal Investigator.
- 1984–86 “Designing an adaptive robototechnical module for highly reliable flexible automatic industrial systems”,
Grant No. 0107-4346-10 from the *Soviet Science Foundation*,
co-Principal Investigator.
- 1984–85 “Metrological characteristics for computational algorithms used in measuring systems”,
Grant No. 0471-4225-40 from the *Soviet Science Foundation*,
Principal Investigator.
- 1983–84 “Designing the unified complex of algorithms for metrological tests in the instruments industry”,
Grant No. 0471-3714-10 from the *Soviet Science Foundation*,
co-Principal Investigator.
- 1983–84 “Designing the standard characteristic of the aperture error and methods for estimating these characteristics”,
Grant from the *Soviet Science Foundation*,
co-Principal Investigator.
- 1982 “Automatic control system for psychological experiments”,
Grant No. 0471-2213-20 from the *Soviet Science Foundation*,
co-Principal Investigator.
- 1980–82 “Automatic system for quick education of computer operators”,
Grant No. 0471-0212-60 from the *Soviet Science Foundation*,
co-Principal Investigator.

Society Membership, Society Offices, Editorship, Refereeing

Membership in Professional Societies

1991-present	Association for Computing Machinery (ACM)
2015-present	ACM Special Interest Group in High-Performance Computing (SIGHPC)
1991-present	Association for Advancement of Artificial Intelligence (AAAI)
2009-present	AHP Academy – Association for Decision Making
2008-present	American Geophysical Union (AGU)
1978-present	American Mathematical Society (AMS)
2008-present	American Physical Society (APS)
2007-present	Association for Symbolic Logic (ASL)
1988-present	Balkan Logical Society
1998-present	Biomathematics and Scientific Computations (a section of the Union of the Mathematicians in Bulgaria)
2008-present	Computability in Europe Association (CiE)
1989-present	European Association for Theoretical Computer Science (EATCS)
2015-present	European Association for Theoretical Computer Science (EATCS), Russian Chapter
2010-present	European Society for Fuzzy Logic and Technology (EUSFLAT)
2006-present	Geological Society of America (GSA)
1995-present	Gesellschaft für Angewandte Mathematik und Mechanik (GAMM) International Association of Applied Mathematics and Mechanics
1991-present	IEEE; Senior Member since 2008
2002-present	IEEE Computational Intelligence Society
1991-present	IEEE Computer Society

2010-present	IEEE Systems, Man, and Cybernetics Society
2015-present	IEEE Technical Committee on Parallel Processing (TCPP)
1992-present	Interest Group in Pure and Applied Logic (in 1992–1993: Interest Group in Propositional and Predicate Logics)
2008-present	International Physics and Control Society
1991-present	International Quantum Structures Association (IQSA)
2006-present	International Society for Imprecise Probability: Theories and Applications (SIPTA)
2010-present	Mexican Society of Artificial Intelligence (SMIA)
1992-present	Neural Modeling Society
1993-present	North American Fuzzy Information Processing Society (NAFIPS)
1998-present	Russian Academy of Metrological Sciences (Foreign Member)
2014-present	Scandinavian Logic Society
1991-present	Sigma Xi, Scientific Research Society
2011-present	Society for Effective Teaching (SET)
2010-present	Society for Industrial and Applied Mathematics (SIAM), University of Texas at El Paso (UTEP) Chapter
2005-present	Society for Mathematics of Uncertainty
1995-present	St. Petersburg Mathematical Society, Russia
1998-present	Texas Action Group (TAG): The University of Texas Research Group for the Study of Reasoning about Actions
1992-present	Upsilon Pi Epsilon (UPE), Computer Science Honor Society
1999-present	Vietnam Fuzzy Systems Society (Foreign Member)
2002–present	Working Group on Interval Methods for Control, part of the IEEE Control Systems Society Technical Committee on Computer Aided Control System Design
2002–present	Working Group on Soft Computing in Image Processing SCIP

2006–12	Association of Mathematics Teacher Educators (AMTE)
2005–07	Association for Computing Machinery (ACM) Special Interest Group on Applied Computing SIGAPP
2012	IEEE Communication Society
1989	Soviet Association for Pure and Applied Logic
1982–89	Soviet National Society on Instruments Theory
1980–84	Soviet National Association of Young Scientists
1987–89	St. Petersburg Mathematical Society, Russia

Offices held in professional societies

2017–19	Member, IEEE Periodical Review and Advisory Committee (PRAC)
2015–18	Vice President, Publications, IEEE Systems, Man, and Cybernetics Society
1995–present	co-founder and co-maintainer, official Interval Computations website http://cs.utep.edu/interval-comp/main.html
1994–present	Berkeley Initiative for Soft Computing (BISC), El Paso representative
1992–present	Center for Fuzzy Logic and Intelligent Systems Research, Coordinator for University of Texas at El Paso
2003–present	Fuzzy Logic and the INternet (FLINT), Special Interest Group (SIG) of the Berkeley Initiative for Soft Computing (BISC), Member, International Advisory Committee
2004–present	Member, Fuzzy Technical Committee, IEEE Computational Intelligence Society
2014–present	International Society of Management Engineers (ISME), Life Fellow
2011–present	International Society of Management Engineers (ISME), Member, Executive Board
1992–present	Neural Modeling Society, El Paso Coordinator
1997–present	SIGInterval, BISC Special Interest Group in Interval Methods in Knowledge Representation, coordinator
2014–present	Elite Member, Society for Mathematics of Uncertainty

- 2007–present Vice Chair, Task Force on Extensions to Type-1 Fuzzy Sets, IEEE Computational Intelligence Society
- 2012–14 President, North American Fuzzy Information Processing Society (NAFIPS)
- 2012–14 Member, Board of Governors, Systems, Man, and Cybernetics Society (SMC) of the Institute of Electrical and Electronics Engineers (IEEE)
- 2014 Member, Transactions on Fuzzy Systems Outstanding Paper Award Committee, IEEE Computational Intelligence Society
- 2013 Chair, Fuzzy Technical Committee, IEEE Computational Intelligence Society
- 2010–12 President-Elect, North American Fuzzy Information Processing Society (NAFIPS)
- 2009–10 Member, Board of Directors, North American Fuzzy Information Processing Society (NAFIPS)
- 2003–07 Chair, Task Force on Interval Computations and Fuzzy Techniques, IEEE Computational Intelligence Society
- 2000–02 SIG GrC, Berkeley Initiative for Soft Computing (BISC) Special Interest Group on Granular Computing, Chair
- 1998 Biomathematics and Scientific Computations (a section of the Union of the Mathematicians in Bulgaria), co-organizer
- 1993–96 Association for Computing Machinery, Rio Grande Chapter, El Paso representative
- 1992–93 Sigma Xi, Scientific Research Society, President of El Paso Chapter
- 1989 Soviet Association for Pure and Applied Logic, Leningrad Branch, Vice-President
- 1982–84 Soviet National Association of Young Scientists, Leningrad Branch, Vice-President

Society committee membership

- 2016 IEEE Systems, Man, and Cybernetics Society Finance Committee, Member
- 2016 IEEE Computational Intelligence Society, Early Career Award Subcommittee, Chair
- 2015–2016 IEEE Systems, Man, and Cybernetics Society Human-Machine Systems Committee, Member

- 2011–present IEEE Systems, Man, and Cybernetics Society, Technical Committee on Soft Computing, Member
- 2008–present Decision Analysis and Support (DAS), Special Interest Group (SIG) of the Berkeley Initiative for Soft Computing (BISC), Member
- 2015–present IEEE Computational Intelligence Society, Member of the Awards Committee
- 2007–present IEEE Computational Intelligence Society, Member of the Task Force on Extensions to Type-1 Fuzzy Sets
- 2007–present International Astronomical Union (IAU), member of Commission 52 “Relativity in Fundamental Astronomy”
- 2004–present IEEE Computational Intelligence Society; member of the Task Force on Granular Computing
- 2006–present IEEE Computational Intelligence Society; member of the AdHoc Committee to Study the Creation of the Technical Committee on Granular Computing
- 2003–present IEEE Computational Intelligence Society; member of the Fuzzy Technical Committee
- 2008–14 Gessellschaft für Angewandte Mathematik und Mechanik (GAMM) International Association of Applied Mathematics and Mechanics; member of GAMM Committee on Computer-Assisted Proofs and Symbolic Computations
- 1996–2007 Gessellschaft für Angewandte Mathematik und Mechanik (GAMM) International Association of Applied Mathematics and Mechanics; member of GAMM Committee on Computer Arithmetic and Scientific Computations

Editorships of Journals and Book Series

- 2016–present Member of the Scientific Committee, *Sistemas y Telematica*
- 2014–present Member of the Editorial Board, *Advanced Technology in Economics*
- 2014–present Member of the Advisory Board, *Advances in Intelligent Systems and Computing*, Springer book series
- 2013–present Member of the Editorial Board, *Archives of Philosophy and History of Fuzziness*
- 2007–present Member of the Editorial Board, *Computational Technologies*
- 2010–present Associate Editor, *Finanmetrika*

- 2011–present Member of the Editorial Board, *ICTACT Journal on Soft Computing*
- 2006–present Member of the Editorial Board, *International Journal of Approximate Reasoning*
- 2005–present Member of the Editorial Board, *International Journal of Computational Intelligence Research*
- 2013–present Member of the Advisory Board, *International Journal of Fuzzy Computation and Modeling (IJFCM)*
- 2000–present Member of the Editorial Board, *International Journal of General Systems*
- 2008–present Member of the Editorial Board, *International Journal of Intelligent Systems Science and Technology*
- 2007–present Member of the Editorial Board, *International Journal of Intelligent Technologies and Applied Statistics*
- 1996–present Editor, section on interval methods, *International Journal on Uncertainty, Fuzziness, and Knowledge-Based Systems*
- 2004–present Member of the Editorial Board, *Journal of Advanced Computational Intelligence and Intelligent Informatics (JACIII)*
- 1998–present Member of the Editorial Advisory Board, *Journal of Intelligent and Fuzzy Systems*
- 2006–present Associate Editor, *Journal of Uncertain Systems*
- 2012–present Member of the Editorial Board, *Mathematical Structures and Modeling*
- 2011–present Member of the Editorial Board, *Neural Computing and Applications*
- 1995–present Member of the Editorial Board, *International Journal Reliable Computing*
- 2011–present Associate Editor, *Soft Computing*
- 2004–present Member of the Editorial Board, *Soft Computing Bulletin*
- 2009–present Member of the Editorial Board, *Soft Computing, Modeling and Simulation*
- 2015–16 Member of the Editorial Board, *Symmetry*
- 2007–present Member of the Editorial Board, *Thailand Statistician: Journal of Thai Statistical Association (TSJTSA)*
- 1996–99 Editor, application section, *International Journal Reliable Computing*

- 1994 Member of the Editorial Board, International Journal *Interval Computations*
- 1989 Member of the Editorial Board, Proceedings of the National Research Institute of Electrical Measuring Instruments, Leningrad, USSR

Editorships of the Special Issues of the Journals

- 2016 Co-editor, a special issue of *Journal of Uncertain Systems* on Uncertainty, 2016, Vol. 10; with Martine Ceberio
- 2016 Co-editor, a special issue of *International Journal of Intelligent Systems* on Fuzzy Theory, 2016, Vol. 31, No. 3; with Hung T. Nguyen
- 2015 Co-editor, a special issue of *International Journal of Uncertainty, Fuzziness, and Knowledge-Based Systems* on Fuzzy Sets, 2015, Vol. 23, Suppl. 1; with Hung T. Nguyen
- 2015 Co-editor, a special issue of *Journal of Uncertain Systems* on Uncertainty, 2015, Vol. 9, No. 2; with Martine Ceberio
- 2014 Co-editor, a special issue of *Journal of Uncertain Systems* on Uncertainty, 2014, Vol. 8, No. 3; with Martine Ceberio
- 2013 Co-editor, a special issue of *International Journal of Approximate Reasoning* on Uncertainty in Financial Econometrics, 2013, Vol. 54, No. 6; with Van-Nam Huynh
- 2013 Co-editor, a special issue of *Journal of Uncertain Systems* on Uncertainty, 2013, Vol. 7, No. 3; with Martine Ceberio
- 2012 Co-editor, a special issue of *Journal of Uncertain Systems* on Uncertainty, 2012, Vol. 6, No. 2; with Martine Ceberio
- 2011 Co-editor, a special issue of *Fuzzy Sets and Systems* on Fuzzy Transform, 2011, Vol. 180, No. 1; with Irina Perfilieva
- 2011 Co-editor, a special issue of *Reliable Computing* with selected papers from SCAN'2008, 2011, Vol. 15; with Martine Ceberio
- 2011 Co-editor, a special issue of *Journal of Advanced Computational Intelligence and Intelligent Informatics (JACIII)*, 2011, Vol. 15, No. 4; with Vyacheslav Kalashnikov
- 2011 Co-editor, a special issue of *Journal of Uncertain Systems* on Uncertainty, 2011, Vol. 5, No. 2; with Martine Ceberio
- 2010 Co-editor, a special issue of *Journal of Uncertain Systems* on Uncertainty, 2010, Vol. 4, No. 4; with Martine Ceberio

- 2009 Co-editor, a special section of *International Journal of Approximate Reasoning on Interval/Probability Uncertainty*, 2009, Vol. 50, No. 8; with Van-Nam Huynh
- 2008 Co-editor, a special issue of *International Journal of Intelligent Systems on Decision Science: Foundations and Applications*, 2009, Vol. 24, No. 1; with Hung T. Nguyen
- 2008 Co-editor, a special issue of *International Journal of Automation and Control (IJAAC)* on selected papers from InTech'07, 2008, Vol. 2, No. 2/3; with Quang P. Ha and Gamini Dissanayake
- 2007 Co-editor, a special issue of *Journal of Advanced Computational Intelligence and Intelligent Informatics (JACIII)* on Selected Papers from InTech'2005, 2007, Vol. 11, No. 10; with Jirapun Daengdej, Pratit Santiprabhob, and Hung T. Nguyen
- 2007 Editor, a special issue of *Journal of Uncertain Systems on Uncertainty*, 2007, Vol. 1, No. 4.
- 2007 Co-editor, a special issue of *Information Sciences on Mathematical Foundations for Intelligent Technologies*, Vol. 177, No. 16; with Hung T. Nguyen and Sompong Dhompongsa
- 2006 Co-editor, a special issue of *Journal of Advanced Computational Intelligence and Intelligent Informatics (JACIII)* on Selected Papers from InTech'2004, Vol. 10, No. 3; with Richard Aló.
- 2004 Co-editor, a special issue of *Soft Computing on Advanced Soft Computing and Its Applications*, Vol. 8, No. 4; with Vilem Novak, Irina Perfilieva, and Hung T. Nguyen
- 2004 Co-editor, a special issue of *International Journal of Intelligent Systems on Intelligent Technologies*, Vol. 19, No. 1/2; with Hung T. Nguyen, Nadipuram S. Prasad, and Pratit Santiprabhob
- 2001 Co-editor, a special issue of *International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems on Intelligent Technologies*, Vol. 9, No. 6; with Nadipuram S. Prasad, and Pratit Santiprabhob
- 1999 Co-editor, a special issue of *International Journal on Uncertainty, Fuzziness, and Knowledge-Based Systems (IJUFKS)* on Fuzzy Systems and Their Applications, Vol. 7, No. 4, with Nguyen Hoang Phuong and Ario Ohsato
- 1997 Co-editor, special issue of the International Journal *Annals of Mathematics and Artificial Intelligence (AMAI)* on Logic Programming, Nonmonotonic Reasoning, and Reasoning about Actions, Vol. 21, No. 2-4; with Chitta Baral and Vladimir Lifschitz

- 1997 Editor, a special issue of *International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems* on Interval Methods in Representing and Processing Uncertainty; Vol. 5, No. 3
- 1995–98 Co-editor, special issues of the International Journal *Reliable Computing* devoted to student papers, 1995, Vol. 1, No. 3; 1996, Vol. 2, No. 3; 1998, Vol. 4, No. 1; with Günther Mayer
- 1994 Co-editor, a special issue of the International Journal *Interval Computations* on Parallel Computations, No. 3

Editorships of Book Translations

- 2005 Co-editor, Russian translation of R. Hammer, M. Hocks, U. Kulisch, D. Ratz, *Numerical Toolbox for Verified Computing*, RHD Publ., Moscow, 2005; with Andrei N. Solovevski and Alexander G. Yakovlev

Conference Organization

- 2018 IEEE International Conference on Fuzzy Systems FUZZ-IEEE'2018, Rio de Janeiro, Brazil, July 8–13, 2018 (Program Committee Co-Chair)
- 2018 17th International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems IPMU'2018, Cadiz, Spain, June 11–15, 2018 (Program Committee)
- 2018 7th World Conference on Soft Computing, Baku, Azerbaijan, May 28–31, 2018 (Co-chair, Program Committee; Co-chair, Special Sessions Committee)
- 2017 IEEE Symposium on Computational Intelligence for Engineering Solutions CIES'2017, Honolulu, Hawaii, November 27 – December 1, 2017 (Symposium Co-Chair)
- 2017 International Joint Conference on Computational Intelligence IJCCI'2017, Funchal, Madeira, Portugal, November 1–3, 2017 (Program Committee)
- 2017 The 36th Annual Conference of the North American Fuzzy Information Processing Society NAFIPS'2017, Cancun, Mexico, October 16–18, 2017 (Program Committee)
- 2017 The First International Conference on Symmetry Symmetry'2017, Barcelona, Spain, October 15–17, 2017 (Scientific Committee)
- 2017 The 2017 IEEE International Conference on Systems, Man, and Cybernetics IEEE SMC'2017, Banff, Canada, October 5–8, 2017 (Technical Program Committee)

- 2017 The 10th Conference of the European Society for Fuzzy Logic and Technology Eusflat'2017, Warsaw, Poland, September 11–15, 2017 (Advisory Board)
- 2017 7th International Conference on Simulation and Modeling Methodologies, Technologies and Applications SIMULTECH'2017, Madrid, Spain, July 29–31, 2017 (Program Committee)
- 2017 The Tenth International Symposium on Imprecise Probability: Theories and Applications ISIPTA'17, Lugano, Switzerland, July 10–14, 2017 (Program Committee)
- 2017 IEEE International Conference on Fuzzy Systems FUZZ-IEEE'2017, Milan, Italy, July 9–12, 2017 (Special Session Co-Chair)
- 2017 Joint 17th World Congress of International Fuzzy Systems Association and 9th International Conference on Soft Computing and Intelligent Systems IFSA-SCIS'2017, Otsu, Japan, June 27–30, 2017 (Program Committee)
- 2017 The 30th International Conference on Industrial, Engineering and Other Applications of Applied Intelligent Systems IEA-AIE'2017, Arras, France, May 2017 (Program Committee)
- 2016 The 7th International Conference on Sciences of Electronics, Technologies of Information and Telecommunications SETIT'2016, Hammamet, Tunisia, December 18–20, 2016 (Scientific Committee)
- 2016 11th International Workshop on Fuzzy Logic and Applications WILF'2016, Napoli, Italy, December 19–21, 2016 (Program Committee)
- 2016 Annual Conference of the North American Fuzzy Information Processing Society NAFIPS'2016, El Paso, Texas, October 31 – November 4, 2016 (Conference Co-Chair)
- 2016 The 2016 IEEE International Conference on Systems, Man, and Cybernetics IEEE SMC'2016, Budapest, Hungary, October 9–12, 2016 (Publicity Co-Chair)
- 2016 17th International Symposium on Scientific Computing, Computer Arithmetic, and Verified Numerical Computation SCAN'2016, Uppsala, Sweden, September 26–30, 2016 (Scientific Committee)
- 2016 8th International IEEE Conference on Intelligent Systems, Sofia, Bulgaria, September 4–6, 2016 (International Program Committee)
- 2016 12th International Conference on Natural Computation, Fuzzy Systems, and Knowledge Discovery ICNC-FSKD'2016, Changsha, China, August 13–15, 2016 (Technical Program Committee)

- 2016 6th International Conference on Simulation and Modeling Methodologies, Technologies and Applications SimulTech'2016, Colmar, Alsace, France, July 21–23, 2016 (Program Committee)
- 2016 16th International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems IPMU'2016, Eindhoven, The Netherlands, June 20–24, 2016 (Program Committee)
- 2016 7th International Workshop on Reliable Engineering Computing REC'2016, Bochum, Germany, June 15–17, 2016 (International Scientific Committee)
- 2016 6th World Conference on Soft Computing, Berkeley, California, May 22–25, 2016 (Co-Chair, Program Committee)
- 2016 Thirtieth AAAI Conference on Artificial Intelligence AAAI'16, Phoenix, Arizona, USA, February 12–17, 2016 (Program Committee)
- 2015 The 6th International Conference on Innovations in Bio-inspired Computing and Applications IBICA'15, Kochi, India, December 16–18, 2015 (Program Committee)
- 2015 IEEE Symposium on Computational Intelligence for Engineering Solutions CIES'2015, Cape Town, South Africa, December 7–10, 2015 (Symposium Co-Chair)
- 2015 IEEE Symposium on Foundations of Computational Intelligence FoCI'15, Cape Town, South Africa, December 7–10, 2015 (Program Committee)
- 2015 IEEE Workshop on Computational Intelligence Tools WCIT'2015, Cape Town, South Africa, December 7–10, 2015 (Technical Program Committee)
- 2015 2015 International Conference on Fuzzy Theory and Its Applications iFUZZY'2015, Yilan, Taiwan, November 18–20, 2015 (International Advisory Committee)
- 2015 7th International Conference on Soft Computing and Pattern Recognition SoC-PaR'2015, Fukuoka, Japan, November 13–15, 2015 (Publicity Committee)
- 2015 International Conference on Fuzzy Computation Theory and Applications FCTA'2015, Lisbon, Portugal, November 12–14, 2015 (Program Committee)
- 2015 14th Mexican International Conference on Artificial Intelligence MICAI'2015, Cuernavaca, Mexico, October 25–31, 2015 (Program Committee)
- 2015 Fourth International Symposium on Integrated Uncertainty in Knowledge Modelling and Decision Making IUKM'2015, Nha Trang, Vietnam, October 15–17, 2015 (Technical Program Committee)
- 2015 First International Conference on Interdisciplinary Development Research IDR'2015, Chiang Mai, Thailand, September 17–18, 2015 (Scientific Committee)

- 2015 Annual Conference of the North American Fuzzy Information Processing Society NAFIPS'2015 and 5th World Conference on Soft Computing, Redmond, Washington, August 17–19, 2015 (Conference Co-Chair)
- 2015 IEEE International Conference on Fuzzy Systems FUZZ-IEEE'2015, Istanbul, Turkey, August 2–5, 2015 (Special Session Co-Chair)
- 2015 International Symposium on Imprecise Probability: Theories and Applications ISIPTA'15, Pescara, Italy, July 20–24, 2015 (Program Committee)
- 2015 World Congress of the International Fuzzy Systems Association IFSA'2015, Asturias, Spain, June 30 – July 3, 2015 (Special Sessions Co-Chair)
- 2015 1st International Summer School for Sciences, History and Philosophy of Sciences & Science Education: New Educational and Fundamental Insights for Sciences and History-Epistemology-Philosophy of Sciences, & Science Education ISSHPSE'2015, Lille, France, June 22–26, 2015 (Scientific Committee)
- 2015 IEEE Congress on Evolutionary Computation IEEE CEC'2015, Sendai, Japan, May 25–28, 2015 (Program Committee)
- 2015 International Conference on Intelligent Information Analysis, Kiev, Ukraine, May 20–22, 2015 (Program Committee)
- 2014 IEEE Symposium on Computational Intelligence for Engineering Solutions CIES'2014, Orlando, Florida, December 9–12, 2014 (Symposium Co-Chair)
- 2014 IEEE Symposium on Foundations of Computational Intelligence FOCI'14, Orlando, Florida, December 9–12, 2014 (Program Committee)
- 2014 2014 International Conference on Fuzzy Theory and Its Applications iFUZZY'2014, Kaohsiung, Taiwan, November 24–26, 2014 (Advisory Committee)
- 2014 13th Mexican International Conference on Artificial Intelligence MICAI'2014, Tuxtla Gutiérrez, Chiapas, Mexico, November 16–22, 2014 (Program Committee)
- 2014 7th IEEE Intelligent Systems'2014 Conference, Warsaw, Poland, September 24–26, 2014 (International Program Committee)
- 2014 16th GAMM–IMACS International Symposium on Scientific Computing, Computer Arithmetic and Validated Numerics SCAN'2014, Wuerzburg, Germany, September 21–26, 2014 (Scientific Committee)
- 2014 Third Brazilian Congress on Fuzzy Systems, Joao Pessoa, Brazil, August 17–20, 2014 (International Program Committee)

- 2014 International Conference on Information Processing and Management of Uncertainty in Knowledge-based Systems IPMU'2014, Montpellier, France, July 15–19, 2014 (Program Committee)
- 2014 Second International Conference on Vulnerability and Risk Analysis and Management ICVRAM'2014 and Sixth International Symposium on Uncertainty Modelling and Analysis ISUMA'2014, Liverpool, UK, July 13–16, 2014 (International Scientific Committee)
- 2014 2014 Joint Rough Set Symposium JRS'2014, a joint conference of the 9th International Conference on Rough Sets and Current Trends in Computing RSCTC'2014 and the 2nd International Conference on Rough Sets and Intelligent Systems Paradigms RSEISP'2014, Granada and Madrid, Spain, July 9–13, 2014 (Program Committee)
- 2014 IEEE International Conference on Fuzzy Systems FUZZ-IEEE'2014, Beijing, China, July 6–11, 2014 (Program Committee)
- 2014 6th Conference on Reliable Engineering Computing REC'2014 “Reliability and Computations of Infrastructures”, Chicago, Illinois, May 25–28, 2014 (Program Committee)
- 2014 4th World Conference on Soft Computing, Berkeley, California, May 25–27, 2014 (Special Sessions co-Chair)
- 2014 Seventh International Conference of Thailand Econometric Society, Chiang Mai, Thailand, January 8–10, 2014 (Program Committee)
- 2013 3rd World Conference on Soft Computing, San Antonio, Texas, December 16–18, 2013 (Chair, Program Committee)
- 2013 5th International Conference on Soft Computing and Pattern Recognition 2013 SoCPaR'13, Hanoi, Vietnam, December 15–18, 2013 (International Advisory Committee)
- 2013 2013 International Conference on Fuzzy Theory and Its Applications iFuzzy'2013, Taipei, Taiwan, December 6–8, 2013 (International Advisory Committee)
- 2013 Fuzzy Systems and Probabilistic Models in Decision Making Track of the Mexican International Conference on Artificial Intelligence MICAI'2013, Mexico City, Mexico, November 24–30, 2013 (Program Committee)
- 2013 The Fifth International Conference on Knowledge and Systems Engineering KSE'2013, Hanoi, Vietnam, October 17–19, 2013 (Program Committee)
- 2013 The 8th conference of the European Society for Fuzzy Logic and Technology EUSFLAT'2013, Milan, Italy, September 11–13, 2013 (Program Committee)

- 2013 10th International Conference on Parallel Processing and Applied Mathematics PPAM'2013, Warsaw, Poland, September 8–11, 2013 (Program Committee)
- 2013 International Conference on Soft Computing, Computing with Words and Perceptions in System Analysis, Decision and Control ICSCCW'2013, Izmir, Turkey, September 2–3, 2013 (Organizing Committee)
- 2013 The 5th World Congress on Nature and Biologically Inspired Computing 2013 NaBIC'13, Fargo, North Dakota, August 12–14, 2013 (Program Committee)
- 2013 The Twenty Third International Joint Conference on Artificial Intelligence IJ-CAI'2013, Beijing, China, August 3–9, 2013 (Program Committee)
- 2013 Eighth International Symposium on Imprecise Probability: Theories and Applications ISIPTA'13, Compiègne, France, July 2–5, 2013 (Program Committee)
- 2013 2013 World Congress of the International Fuzzy Systems Association IFSA'2013, Edmonton, Canada, June 24–28, 2013 (Program Committee)
- 2013 IEEE International Conference on Cybernetics, Lausanne, Switzerland, June 13–15, 2013 (Program Committee)
- 2013 International Conference on Applied Statistics, Maha Sarakham, Thailand, May 14–17, 2013 (Program Committee)
- 2013 IEEE Symposium on Computational Intelligence for Engineering Solutions CIES'2013, Singapore, April 16–19, 2013 (Symposium Co-Chair)
- 2013 IEEE Symposium on Foundations of Computational Intelligence FoCI'2013, Singapore, April 16–19, 2013 (Program Committee)
- 2013 First International Symposium on Affective Engineering ISAE'2013, Kitakyushu, Japan, March 6–8, 2013 (Program Committee)
- 2013 Sixth International Conference of Thailand Econometric Society, Chiang Mai, Thailand, January 10–11, 2013 (Program Committee)
- 2012 Fourth International Conference on Soft Computing and Pattern Recognition SoC-PaR'2012, Brunei, December 10–13, 2012 (Program Committee)
- 2012 2nd World Conference On Soft Computing, Baku, Azerbaijan, December 3–5, 2012 (Co-Chair, Program Committee)
- 2012 4th World Congress on Nature and Biologically Inspired Computing NaBIC'2012, Mexico City, Mexico, November 5–9, 2012 (Program Committee)
- 2012 World Congress on Information and Communication Technologies WICT'2012, Trivandrum, India, October 30 – November 2, 2012 (Program Committee)

- 2012 15th GAMM-IMACS International Symposium on Scientific Computing, Computer Arithmetic and Validated Numerics SCAN'2012, Novosibirsk, Russia, September 24-28, 2012 (Scientific Committee)
- 2012 5th International Workshop on Constraint Programming and Decision Making Co-ProD'12, Novosibirsk, Russia, September 23, 2012 (Organizing Committee)
- 2012 4th International Conference on Intelligent Networking and Collaborative Systems INCoS'2012, Track on Fuzzy Systems and Knowledge Management, Bucharest, Romania, September 19-21, 2012 (Program Committee)
- 2012 6th International Conference on Scalable Uncertainty Management SUM'2012, Marburg, September 17-19, 2012 (Program Committee)
- 2012 IEEE 6th International Conference "Intelligent Systems" IEEE IS'12, Sofia, Bulgaria, September 6-8, 2012 (Program Committee)
- 2012 Tenth International Conference on Application of Fuzzy Systems and Soft Computing ICAFS'2012, Lisbon, Portugal, August 29-30, 2012 (Conference Co-Chair)
- 2012 The IEEE International Conference on Granular Computing GrC'2012, Hangzhou, China, August 11-13, 2012 (Advisory Board)
- 2012 31st International Conference of the North American Fuzzy Information Processing Society NAFIPS'12, Berkeley, California, August 6-8, 2012 (Special Sessions Chair)
- 2012 Special Track on Socially Inspired Complex Systems of The Sixth International Conference on Complex, Intelligent, and Software Intensive Systems CISIS'2012, Palermo, Italy, July 4-6, 2012 (Program Committee)
- 2012 IEEE International Conference on Fuzzy Systems FUZZ-IEEE'2012, Brisbane, Australia, June 10-15, 2012 (Technical Co-Chair, Organizing Committee)
- 2012 International Conference on Intelligent Interactive Multimedia Systems and Services KES-IIMSS'2012, Gifu, Japan, May 23-25, 2012 (Program Committee)
- 2012 American Society for Engineering Education (ASEE) Gulf Southwest Regional Conference, El Paso, Texas, April 4-6, 2012 (Organizing and Advisory Committee)
- 2012 Fifth Conference of Thailand Econometric Society, Chiang Mai, Thailand, January 12-13, 2012 (Program Committee)
- 2011 10th Mexican International Conference on Artificial Intelligence MICAI'2011, Puebla, Mexico, November 26 - December 4, 2011 (Program Committee)
- 2011 11th International Conference on Intelligent Systems Design and Applications ISDA'11, Cordoba, Spain, November 22-24, 2011 (Program Committee)

- 2011 International Symposium on Computational Intelligence and Design, Hangzhou, China, October 28–30, 2011 (Program Committee)
- 2011 3rd International Conference on Soft Computing and Pattern Recognition SoC-PaR'2011, Dalian, China, October 14–16, 2011 (Program Committee)
- 2011 International Conference on Scalable Uncertainty Management SUM'2011, Dayton, Ohio, October 10–12, 2011 (Program Committee)
- 2011 Dagstuhl Seminar on Uncertainty Modeling and Analysis with Intervals: Foundations, Tools, Applications, Dagstuhl, Germany, September 11–16, 2011 (co-organizer)
- 2011 International Conference on Soft Computing, Computing with Words and Perceptions in System Analysis, Decision, and Control ICSCCW'2011, Antalya, Turkey, September 1–2, 2011 (Conference Co-Chair)
- 2011 2011 International Conference on Intelligent Human-Machine Systems and Cybernetics IHMSC'2011, Hangzhou, China, August 27–28, 2011 (Program Committee)
- 2011 Eighth International Symposium on Management Engineering ISME'2011, Taipei, Taiwan, August 21–25, 2011 (Advisory Committee)
- 2011 International Conference on Natural Computation / International Conference on Fuzzy Systems and Knowledge Discovery ICNC-FSKD'2011, July 26–28, 2011, Shanghai, China (Program Committee)
- 2011 Seventh International Symposium on Imprecise Probability: Theories and Applications ISIPTA'11, Innsbruck, Austria, July 25–28, 2011 (Program Committee)
- 2011 The 7th conference of the European Society for Fuzzy Logic and Technology EUSFLAT'2011 and Les Rencontres Francophones sur la Logique Floue et ses Applications LFA'2011, Aix-Les-Bains, France, July 18–22, 2011 (Program Committee)
- 2011 The Twenty Second International Joint Conference on Artificial Intelligence IJCAI'2011, Barcelona, Spain, July 16–22, 2011 (Program Committee)
- 2011 IEEE International Conference on Fuzzy Systems FUZZ-IEEE'2011, Taipei, Taiwan, June 27–30, 2011 (Organizing Committee)
- 2011 International Fuzzy Systems Association and Asian Fuzzy Systems Symposium IFSA-AFSS'2011, Surabaya and Bali Island, Indonesia, June 21–25, 2011 (International Program Committee)
- 2011 World Congress on Soft Computing, San Francisco, California, May 23–25, 2011 (Program Committee)

- 2011 IEEE Symposium on Foundations of Computational Intelligence FOCI'11, Paris, France, April 11–15, 2011 (Program Committee)
- 2011 IEEE Symposium on Advances to Type-2 Fuzzy Logic T2-FUZZ'2011, Paris, France, April 11–15, 2011 (Program Committee)
- 2011 6th International Conference Sciences of Electronic, Technologies of Information and Telecommunications SETIT'2011, Sousse, Tunisia, March 23–26, 2011 (Program Committee)
- 2011 30th International Conference of the North American Fuzzy Information Processing Society NAFIPS'11, El Paso, Texas, March 18–20, 2011 (Conference Co-Chair)
- 2011 Eighth International Conference on Computability and Complexity in Analysis CCA'2011, Cape Town, South Africa January 31 – February 4, 2011 (Program Committee)
- 2010 The Eleventh International Conference on Intelligent Technologies InTech'10: Towards Creative Technology for the 21st Century, Bangkok, Thailand, December 14–16, 2010 (Co-Chair, Program Committee)
- 2010 Tenth International Conference on Intelligent Systems Design and Applications ISDA'2010, Cairo, Egypt, November 29 – December 1, 2010 (Technical Program Committee)
- 2010 9th Mexican International Conference on Artificial Intelligence, Pachuca, Mexico, November 8–13, 2010 (Program Committee)
- 2010 Brazilian Symposium on Artificial Intelligence SBIA'2010, Sao Paulo, Brazil, October 2010 (Program Committee)
- 2010 The International Symposium on Innovative Management, Information and Production, Hangzhou, China, October 9–11, 2010 (International Program Committee)
- 2010 3rd International Workshop on Constraint Programming and Decision Making Co-ProD'10, Lyon, France, September 30 – October 1, 2010 (Organizing Committee)
- 2010 14th GAMM–IMACS International Symposium on Scientific Computing, Computer Arithmetic and Validated Numerics SCAN'2010, Lyon, France, September 27–30, 2010 (Scientific Committee)
- 2010 Fourth International Conference on Scalable Uncertainty Management SUM'10, Toulouse, France, September 27–29, 2010 (Program Committee)
- 2010 International Conference on Machines, Computations, and Universality MCU'2010, Pittsburgh, Pennsylvania, September 21–25, 2010 (Program Committee)

- 2010 7th International Conference on Fuzzy Systems and Knowledge Discovery FSKD'10, Yantai, China, August 10–12, 2010 (Technical Program Committee)
- 2010 IEEE International Conference on Fuzzy Systems FUZZ-IEEE'2010, July 18–23, 2010, Barcelona, Spain (Special Session Chair)
- 2010 29th International Conference of the North American Fuzzy Information Processing Society NAFIPS'10, Toronto, Canada, July 12–14, 2010 (Program Committee)
- 2010 13th International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems IPMU'2010, Dortmund, Germany, June 28 – July 2, 2010 (Program Committee)
- 2010 Seventh International Conference on Computability and Complexity in Analysis CCA'2010, Zhenjiang, China, June 21–25, 2010 (Program Committee)
- 2010 Third International Conference on E-Medical Systems E-MediSys'2010, Fez, Morocco, May 12–14, 2010 (Program Committee)
- 2010 International Symposium on Integrated Uncertainty Management and Applications, Japan Advanced Institute of Science and Technology, Ishikawa, Japan, April 9–11, 2010 (Program Committee)
- 2010 The Fourth International Workshop on Reliable Engineering Computing REC'2010, Singapore, March 3–5, 2010 (Program Committee)
- 2010 3rd Annual Econometric Conference, Chiang Mai, Thailand, January 7–8, 2010 (Scientific Program Committee)
- 2009 Tenth International Conference on Intelligent Technologies InTech'09, Guilin, China, December 12–15, 2009 (Co-Chair, Program Committee)
- 2009 8th Mexican International Conference on Artificial Intelligence MICAI'09, Guanajuata, Mexico, November 9–13, 2009 (Program Committee)
- 2009 International Conference on Intelligent Human-Machine Systems and Cybernetics IHMSC'09, Hangzhou, China, August 26–27, 2009 (Program Committee)
- 2009 World Congress of the International Fuzzy Systems Association IFSA'2009, Lisbon, Portugal, July 20–24, 2009 (International Program Committee)
- 2009 Sixth International Symposium on Imprecise Probability: Theories and Applications ISIPTA'09, Durham, England, UK, July 14–18, 2009 (Program Committee)
- 2009 Fourth International Conference on Rough Set and Knowledge Technology, Gold Coast, Australia, July 14–16, 2009 (Program Committee)

- 2009 2nd International Conference on Uncertainty in Structural Dynamics USD'09, Sheffield, England, UK, June 15–17, 2009 (Scientific Committee)
- 2009 International Joint Conference on Neural Networks IJCNN'2009, Atlanta, Georgia, June 14–19, 2009 (Program Committee)
- 2009 Annual International Conference of the North American Fuzzy Information Processing Society NAFIPS'09, Cincinnati, Ohio, June 14–17, 2009 (Co-Chair, Program Committee)
- 2009 IEEE Workshop on Hybrid Intelligent Models and Applications HIMA'09, Nashville, Tennessee, March 30 – April 2, 2009 (Program Committee)
- 2009 5th International Conference on Sciences of Electronic, Technologies of Information and Telecommunications SETIT'2009, Hammamet, Tunisia, March 22–26, 2009 (Program Committee)
- 2009 2nd International Conference on Finite Element Methods in Engineering and Science FEMTEC'2009, Lake Tahoe, California, January 5–9, 2009 (Scientific Committee)
- 2008 Workshop on Soft Computing in conjunction with the Tenth Pacific Rim International Conference on Artificial Intelligence PRICAI'08, Hanoi, Vietnam, December 15–19, 2008 (Program Committee)
- 2008 International Conference on E-Medical Systems E-Medisys'08, Sfar, Tunisia, October 29–31, 2008 (Program Committee)
- 2008 7th Mexican International Conference on Artificial Intelligence MICAI'08, Mexico City, Mexico, October 27–31, 2008 (Program Committee)
- 2008 International Multi-conference on Computer Science and Information Technology, Wisla, Poland, October 20–22, 2008 (Technical Program Committee)
- 2008 Ninth International Conference on Intelligent Technologies InTech'08, Samui, Thailand, October 7–9, 2008 (co-Chair, International Program Committee)
- 2008 1st International Conference on Security Technologies SecTech'08, Samui, Thailand, October 7–9, 2008 (International Program Committee)
- 2008 Mexican International Conference on Computer Science ENC'08, Mexicali, Baja California, Mexico, October 6–10, 2008 (Program Committee)
- 2008 13th GAMM–IMACS International Symposium on Scientific Computing, Computer Arithmetic, and Verified Numerical Computation SCAN'2008, El Paso, Texas, September 29 – October 3, 2008 (Scientific Committee)

- 2008 Soft Methods in Probability and Statistics SMPS'08, Toulouse, France, September 8–10, 2008 (Program Committee)
- 2008 Eighth International Conference on Application of Fuzzy Systems and Soft Computing ICAFS'2008, Helsinki, Finland, September 1–3, 2008 (Program Committee)
- 2008 1st Annual North American Simulation Technology Conference NASTEC'08, Montreal, Canada, August 13–15, 2008 (Program Committee)
- 2008 International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems IPMU'08, Malaga, Spain, June 22–27, 2008 (Program Committee)
- 2008 IEEE International Conference on Fuzzy Systems FUZZ-IEEE'08, Hong Kong, China, June 1–6, 2008 (Program Committee)
- 2008 Annual International Conference of the North American Fuzzy Information Processing Society NAFIPS'08, New York City, May 18–21, 2008 (Co-Chair, Program Committee)
- 2008 3rd International Conference on Rough Sets and Knowledge Technology RSKT'08, Chengdu, China, May 17–19, 2008 (Program Committee)
- 2008 Twelfth International Conference on Intuitionistic Fuzzy Sets ICIFS'2008, Sofia, Bulgaria, May 17–18, 2008 (Program Committee)
- 2008 International Workshop on Interval/Probabilistic Uncertainty and Non-Classical Logics, Japan Advanced Institute of Science and Technology (JAIST), Nomi (near Kanazawa), Japan, March 25–28, 2008 (Program Committee)
- 2008 The 5th International Symposium on Management Engineering ISME'2008, Kitakyushu, Japan, March 15–17, 2008 (Program Committee)
- 2008 The Third International Workshop on Reliable Engineering Computing, Savannah, Georgia, February 20–22, 2008 (Program Committee)
- 2007 Eighth International Conference on Intelligent Technologies InTech'07, Sydney, Australia, December 12–14, 2007 (co-Chair, International Program Committee)
- 2007 The IEEE International Conference on Granular Computing GrC'2007, Silicon Valley, California, November 2–4, 2007 (Advisory Board)
- 2007 5th International Conference of European Society for Fuzzy Logic and Technology EUSFLAT'2007, Ostrava, Czech Republic, September 11–14, 2007 (Program Committee)

- 2007 Fourth International Conference on Soft Computing, Computing with Words and Perceptions in System Analysis, Decision and Control ICSCCW'2007, Antalya, Turkey, August 27–28, 2007 (International Program Committee)
- 2007 Third International Conference on Natural Computation ICNC'07, Haikou, China, August 24–27, 2007 (Program Committee)
- 2007 International Conference on Innovative Soft Computing and Its Applications IS-CIA'2007, Malaysia, August 20–22, 2007 (International Program Committee)
- 2007 5th International Symposium on Imprecise Probabilities and Their Applications ISIPTA'07, Prague, Czech Republic, July 16–19, 2007 (Program Committee)
- 2007 Annual International Conference of the North American Fuzzy Information Processing Society NAFIPS'07, San Diego, California, June 24–27, 2007 (Technical Program Committee)
- 2007 World Congress of the International Fuzzy Systems Association IFSA'2007, Cancun, Mexico, June 18–21, 2007 (International Technical Committee)
- 2007 1st International Conference on Uncertainty in Structural Dynamics USD'2007, Sheffield, UK, June 11–13, 2007 (Scientific Committee)
- 2007 Joint Rough Sets Symposium JRS'07, Toronto, Canada, May 14–16, 2007 (Program Committee)
- 2007 1st Joint NMSU/UTEP Workshop on Mathematics and Computer Science, Las Cruces, New Mexico, April 14, 2007 (Organizing Committee)
- 2007 IEEE Symposium on Foundations of Computational Intelligence, Honolulu, Hawaii, April 1–5, 2007 (International Program Committee)
- 2007 4th International Conference Sciences of Electronic, Technologies of Information and Telecommunications SETIT'2007, Hammamet, Tunisia, March 25–29, 2007 (Program Committee)
- 2006 9th International Conference on Information Technology CIT'2006, Bhubaneswar, India, December 18–21, 2006 (Program Committee)
- 2006 Seventh International Conference on Intelligent Technologies InTech'06, Taipei, Taiwan, December 12–15, 2006 (co-Chair, International Program Committee)
- 2006 International Conference on Software, Knowledge, Information Management and Applications SKIMA'2006, Chiang Mai, Thailand, December 12–15, 2006 (International Program Committee)
- 2006 International Workshop on Finite Element Methods in Science and Engineering FEM'2006, El Paso, Texas, December 11–14, 2006 (Local Organizing Committee)

- 2006 International Symposium on Fuzzy and Rough Sets ISFUROS06, Santa Clara, Cuba, December 5–8, 2006 (Program Committee)
- 2006 The Fifth International Conference on Rough Sets and Current Trends in Computing RSCTC'2006, Kobe, Japan, November 6–8, 2006 (Program Committee)
- 2006 The 11th Conference Fuzzy Theory and Technology FTT'06, Kaohsiung, Taiwan, October 8–11, 2006 (Program Committee)
- 2006 12th GAMM–IMACS International Symposium on Scientific Computing, Computer Arithmetic, and Validated Numerics SCAN'2006, Duisburg, Germany, September 26–29, 2006 (Scientific Committee)
- 2006 11th Online World Conference on Soft Computing in Industrial Applications WSC11, September 18 – October 6, 2006 (Program Committee)
- 2006 9th Fuzzy Days – International Conference on Computational Intelligence, Dortmund, Germany, September 18–20, 2006 (Program Committee)
- 2006 First Thailand International Conference on 21st Century Information Technology in Mathematics Education, Chiang Mai, Thailand, September 17–20, 2006 (Organizing Committee)
- 2006 Soft Methods in Probability and Statistics SMPS'06, Bristol, UK, September 5–7, 2006 (Scientific Committee)
- 2006 13th Workshop on Logic, Language, Information and Computation WoLLIC'2006, Stanford, California, July 18–21, 2006 (Program Committee)
- 2006 IEEE International Conference on Fuzzy Systems FUZZ-IEEE'2006, Vancouver, Canada, July 16–21, 2006 (Program Committee)
- 2006 International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems IPMU'06, Paris, France, July 2–7, 2006 (Program Committee)
- 2006 International Conference on Interval Analysis and Its Applications, Peterhof, St. Petersburg, Russia, July 1–4, 2006 (Program Committee)
- 2006 Second International Conference on Fuzzy Sets and Soft Computing in Economics and Finance FSSCEF'2006, St. Petersburg, Russia, June 28 – July 1, 2006 (Program Committee)
- 2006 International Forum “Product lifecycle management in informational environment of up-to-date enterprises” isiCAD'2006, Akademgorodok, Novosibirsk, Russia, May 29–30, 2006 (Program Committee)

- 2006 The Second Workshop on Reliable Engineering Computing, Savannah, Georgia, February 22–24, 2006 (Program Committee)
- 2005 Sixth International Conference on Intelligent Technologies InTech'05, Phuket, Thailand, December 14–16, 2005 (co-Chair, International Program Committee)
- 2005 International Conference on Machine Intelligence ACIDCA-ICMI'2005, Tozeur, Tunisia, November 5–7, 2005 (International Program Committee)
- 2005 The Berkeley Initiative in Soft Computing Special Event BISCSE'05 “Forging New Frontiers”, Berkeley, California, November 2–5, 2005 (International Advisory Committee)
- 2005 Richard Tapia Celebration of Diversity in Computing Conference, Albuquerque, New Mexico, October 19–22, 2005 (Program Committee)
- 2005 10th Online World Conference on Soft Computing in Industrial Applications WSC10, September 19 – October 7, 2005 (Program Committee)
- 2005 Second International Conference on Computability and Complexity in Analysis CCA'2005, Kyoto, Japan, August 26–29, 2005 (Program Committee)
- 2005 Bioinspired System and Brain-like Architecture Workshop BISBC'05, part of the Joint Conference in Information Sciences JCIS'2005, Salt Lake City, Utah, July 21–26, 2005 (Program Committee)
- 2005 4th International Symposium on Imprecise Probabilities and Their Applications ISIPTA'05, Pittsburgh, Pennsylvania, July 20–23, 2005 (Program Committee)
- 2005 Fourth International Conference on Information and Management Sciences IMS'2005, Kunming and Dali, China, July 1–8, 2005 (Program Committee)
- 2005 IEEE International Conference on Fuzzy Systems FUZZ-IEEE'2005, Reno, Nevada, May 22–25, 2005 (Program Committee)
- 2005 2005 Meeting of the Southwestern Section of the Mathematical Association of America (MAA), El Paso, Texas, April 1–2, 2005 (special session organizer)
- 2005 3rd International Conference Sciences of Electronic, Technologies of Information and Telecommunications SETIT'05, Susa, Tunisia, March 27–31, 2005 (Program Committee)
- 2005 Track on Reliable Computations and their Applications (RCA) at the 20th Annual ACM Symposium on Applied Computing SAC'05, Santa Fe, New Mexico, March 13–17, 2005 (Track co-Chair)
- 2004 International Conference on Information Technology CIT'2004, Hyderabad, India, December 20–23, 2004 (Program Committee)

- 2004 International Symposium on Computational Intelligent and Industrial Applications ISCIIA'2004, Haikou, China, December 20–22, 2004 (Program Committee)
- 2004 Asian Fuzzy Systems Society (AFSS) International Conference on Fuzzy Systems, Hanoi, Vietnam, December 14–16, 2004 (International Program Committee)
- 2004 Fifth International Conference on Intelligent Technologies InTech'04, Houston, Texas, December 2–4, 2004 (International Program Committee)
- 2004 Workshop on Deduction and Reasoning Techniques DRT'04, co-located with 9th Ibero-American Conference on Artificial Intelligence IBERAMIA'2004, November 22–23, 2004, Puebla, Mexico (International Program Committee)
- 2004 11th GAMM–IMACS International Symposium on Scientific Computing, Computer Arithmetic, and Validated Numerics SCAN'2004, Fukuoka, Japan, October 4–8, 2004 (Scientific Committee)
- 2004 Joint 2nd International Conference on Soft Computing and Intelligent Systems and 5th International Symposium on Advanced Intelligent Systems SCIS&ISIS'2004, Yokohama, Japan, September 21–24, 2004 (International Program Committee)
- 2004 2004 Second International Workshop on Web-based Support Systems WSS'2004, in conjunction with the 2004 IEEE/WIC/ACM International Conference on Web Intelligence WI'2004, Beijing, China, September 20, 2004 (Program Committee)
- 2004 Workshop on Reliable Engineering Computing REC'2004, Savannah, Georgia, September 15–17, 2004 (Program Committee)
- 2004 International Conference on Computability and Complexity in Analysis CCA'04, Lutherstadt-Wittenberg, Germany, August 16–20, 2004 (Program Committee)
- 2004 The Nineteenth National Conference on Artificial Intelligence AAI'2004, San Jose, California, July 25–29, 2004 (Program Committee)
- 2004 International Workshop “Constraint-based Approaches and Methods of Mathematical Modelling for Intelligent CAD/CAM/CAE systems: From Methods to Applications” isiCAD'2004, Akademgorodok, Novosibirsk, Russia, June 22–24, 2004 (Program Committee)
- 2004 2nd International Workshop on Interval Mathematics and Constraint Propagation methods IMCP'04, Akademgorodok, Novosibirsk, Russia, June 21–24, 2004 (Program Committee)
- 2004 Fourth International Conference on Rough Sets and Current Trends in Computing RSCTC'2004, Uppsala, Sweden, June 1–4, 2004 (Program Committee)
- 2003 International Conference on Information Technology CIT'2003, Bhubaneswar, Orissa, India, December 22–25, 2003 (Program Committee)

- 2003 4th International Conference on Intelligent Technologies InTech'2003, Chiangmai, Thailand, December 17–19, 2003 (International Program Committee)
- 2003 Second International Joint Workshop on Soft Computing for Internet and Bioinformatics FLINT-CIBI'03, Berkeley, California, December 15–18, 2003 (International Advisory Committee)
- 2003 3rd International Conference on Optoinformatics, St. Petersburg, Russia, October 20–24, 2003 (Program Committee)
- 2003 Seventh International Conference on Intuitionistic Fuzzy Sets ICIFS'2003, Sofia, Bulgaria, August 23–24, 2003 (Program Committee)
- 2003 Annual International Conference of the North American Fuzzy Information Processing Society NAFIPS'2003, Chicago, Illinois, July 24–26, 2003 (session co-organizer)
- 2003 IEEE International Conference on Fuzzy Systems FUZZ-IEEE'2003, St. Louis, Missouri, May 25–28, 2003 (program committee).
- 2003 Mini-Symposia on Geoinformatics: Creating Cyberinfrastructure for the Geosciences at SIAM Conference on Mathematical and Computational Issues in the Geosciences, Austin, Texas, March 17–20, 2003 (co-organizer).
- 2002 International Conference on Information Technology CIT'02, Bhubaneswar, India, December 21–24, 2002 (program committee).
- 2002 Joint 3rd International Conference on Intelligent Technologies and 3rd Vietnam-Japan Symposium on Fuzzy Systems and Applications InTech/VJFUZZY'2002 Hanoi, Vietnam, December 3–5, 2002 (International Program Committee)
- 2002 10th GAMM–IMACS International Symposium on Scientific Computing, Computer Arithmetic, and Validated Numerics SCAN'2002, Paris, France, September 23–27, 2002 (scientific committee)
- 2002 Second International Workshop on Intelligent Systems Design and Applications ISDA'02, in conjunction with the Second International Conference on Neural, Parallel and Scientific Computations NSPC'02, Atlanta, Georgia, August 7–8, 2002 (technical committee).
- 2002 10th Mediterranean Conference on Control and Automation MED'2002, Lisbon, Portugal, July 9–13, 2002 (session co-organizer)
- 2002 Annual International Conference of the North American Fuzzy Information Processing Society NAFIPS-FLINT 2002, Fuzzy Logic and Internet (FLINT), New Orleans, Louisiana, June 27–29, 2002 (international advisory committee)

- 2002 Validated Computing 2002, SIAM Workshop, Toronto, Canada, May 23–25, 2002 (organizing committee)
- 2001 International Conference on Information Technology ICIT'2001, Gopalpur-on-Sea, Orissa, India, December 20–22, 2001 (program committee)
- 2001 Second Vietnam-Japan Bilateral Symposium on Fuzzy Systems and Applications VJFUZZY'2001, Hanoi, Vietnam, December 7–8, 2001 (International Advisory Committee)
- 2001 IEEE International Conference on Fuzzy Systems, Melbourne, Australia, December 2001 (technical program committee)
- 2001 Fifth International Conference on Intuitionistic Fuzzy Sets ICIFS'2001, Sofia, September 22–23, 2001 (program committee)
- 2001 Workshop on Granular Computing GrC'2001, Bangor, Wales, U.K., June 19–22, 2001 (international program committee)
- 2001 Symposium on Fuzzy Logic and its Applications FLA'2001, Bangor, Wales, U.K., June 19–22, 2001 (international program committee)
- 2000 International Conference on Information Technology ICIT'2000, Bhubaneswar, India, December 21–23, 2000 (program committee)
- 2000 International Conference on Intelligent Technologies, Bangkok, Thailand, December 13–15, 2000 (program committee; publicity co-chair)
- 2000 International Conference on Soft Computing IIZUKA'2000, Iizuka city, Fukuoka, Japan, October 1–4, 2000 (program committee)
- 2000 9th GAMM - IMACS International Symposium on Scientific Computing, Computer Arithmetic, and Validated Numerics SCAN'2000, Karlsruhe, Germany, September 19–22, 2000 (international steering committee)
- 2000 Second International Discourse “With Fuzzy Logic in the New Millenium”, Mackay, Great Barrier Reef, Australia, September 18–21, 2000 (program committee)
- 2000 Fourth International Conference on Intuitionistic Fuzzy Sets ICIFS'2000, Sofia, September 16–17, 2000 (program committee)
- 2000 Annual International Conference of the North American Information Processing Society NAFIPS'00, Atlanta, Georgia, July 13–15, 2000 (program committee)
- 2000 6th International Conference on Applications of Computer Algebra IMACS-ACA'2000, St. Petersburg, Russia, June 25–28, 2000 (session co-organizer)

- 2000 Integrated Design and Process Technology Conference, Section on Process and Software Specification, Dallas, TX, June 4–8, 2000 (program committee)
- 2000 IEEE International Conference on Fuzzy Systems, San Antonio, Texas, May 7–10, 2000 (program committee; publicity chair)
- 1999 International Conference on Information Technology ICIT'99, Bhubaneswar, India, December 20–22, 1999 (program committee)
- 1999 Third International Conference on Intuitionistic Fuzzy Sets ICIFS'99, Sofia, Bulgaria, October 16–17, 1999 (program committee)
- 1999 14th IEEE International Symposium on Intelligent Control/Intelligent Systems and Semiotics ISIC/ISAS'99, Cambridge, Massachusetts, September 15–17, 1999 (session chair)
- 1999 International Symposium on Medical Informatics and Fuzzy Technology, MIF'99, Hanoi, Vietnam, August 27–29, 1999 (program committee)
- 1999 Annual International Conference of the North American Information Processing Society NAFIPS'99, New York, New York, June 10–12, 1999 (program committee)
- 1999 SIAM Mini-Symposium on Possible Future Directions in Applications of Interval Computations, Atlanta, Georgia, May 12–15, 1999 (co-organizer).
- 1999 Workshop on Applications of Interval Analysis to Systems and Control with special emphasis on recent advances in Modal Interval Analysis MISC'99, Girona, Spain, February 24–26, 1999 (program committee)
- 1998 Second Seminar in Medical Informatics (SMI'97), Hanoi, Vietnam, December 28–29, 1998 (program committee)
- 1998 Vietnam-Japan Workshop on Fuzzy Logic for Technology VJFUZZY'98, September 30–October 2, 1998, HaLong Bay, Vietnam (International Advisory Committee)
- 1998 A Joint Conference on the Science and Technology of Intelligent Systems STIS'98:
 - IEEE International Symposium on Intelligent Control (ISIC);
 - International Symposium on Computational Intelligence in Robotics and Automation (CIRA), and
 - Intelligent Systems and Semiotics (ISAS),
Gaithersburg, MD, September 14–17, 1998 (program committee)
- 1998 International Symposium on Scientific Computing, Computer Arithmetic, and Validated Numerics SCAN'98, Budapest, Hungary, September 1998 (scientific committee)

- 1998 Annual International Conference of the North American Information Processing Society NAFIPS'98, Pensacola Beach, Florida, August 20–21, 1998, (program committee).
- 1998 SIAM Mini-Symposium Applications of Interval Computations, Toronto, Canada, July 13–17, 1998 (co-organizer)
- 1998 Interval'98: International Conference on Interval Methods and their Application in Global Optimization, Nanjing, China, April 20–23, 1998 (program committee)
- 1998 Mexican Expert Systems Interval Conference (MEXICON'98), Workshop on Interval Computations and its Applications to Reasoning Under Uncertainty, Knowledge Representation, and Control Theory (in conjunction with the 4th World Congress on Expert Systems) Mexico City, Mexico, March 16–20, 1998 (scientific committee)
- 1997 International Workshop on Intelligent Non-Destructive Evaluation (NDE) Sciences for Aging and Futuristic Aircraft, El Paso, TX, September 30–October 2, 1997 (session co-chair)
- 1997 International Conference on Intelligent Systems and Semiotics (ISAS'97), September 22–25, 1997, Gaithersburg, MD (program committee).
- 1997 First Seminar in Medical Informatics (SMI'97), Hanoi, Vietnam, September 23–24, 1997 (program committee)
- 1997 SCAN-97: GAMM/IMACS International Symposium on Scientific Computing, Computer Arithmetic and Validated Numerics, Lyon, France, September 10–12, 1997 (scientific committee)
- 1997 IEEE International Conference on Fuzzy Systems, Barcelona, Spain, July 1–5, 1997 (program committee)
- 1997 International Workshop on Computational Science and Engineering, Hefei, China, May 27–28, 1997 (member of the International Advisory Committee).
- 1997 Combined Workshops on Computational Complexity and Interval Computations (in conjunction with ACM Symposium on Theory of Computing STOC'97), May 6–8, 1997, El Paso, TX (co-organizer)
- 1997 ACM Symposium on Theory of Computing STOC'97, El Paso, Texas, May 4–6, 1997, (member, local organizing committee).
- 1997 NASA University Research Centers Conference, Albuquerque, NM, February 16–19, 1997 (member, program committee; session chair).
- 1996 9th International Symposium on Artificial Intelligence/6th International Conference on Industrial Fuzzy Control and Intelligent Systems, ISAI/IFIS 96, Cancun, Mexico, November 12–15, 1996 (sponsored by the IJCAI and AAAI) (program committee).

- 1996 Second SC COSMIC (South and Central Computational Science in Minority Institutions Consortium) Student Conference on Computational Science, El Paso, TX, October 25–27, 1996 (chairman, program committee)
- 1996 WAI'96: II Workshop on Computer Arithmetic, Interval Methods, and Symbolic Computation, Recife, Brazil, August 7–8, 1996 (program committee).
- 1996 SIAM Mini-Symposium Verification Theory, Techniques and Software: Components of Modern Reliable Scientific Computing, Kansas City, July 22–26, 1996 (co-organizer).
- 1996 Annual International Conference of the North American Information Processing Society NAFIPS'96, Berkeley, California, June 20–22, 1996 (program committee).
- 1996 Workshop on Interval Techniques in Computing, Modelling, Simulation and Optimization (part of IASTED International Conference Modeling, Simulation and Optimisation), Gold Coast, Australia, May 5, 1996 (advisory panel).
- 1996 International Discourse on Fuzzy Logic and The Management of Complexity, Sydney, Australia, January 1996 (program committee).
- 1995 Theories of Logic Programming, Non-Monotonic Reasoning, and their application to reasoning about Actions: The first Shell Oil Symposium, in honor of Michael Gelfond's 50th birthday, El Paso, TX, November 1995 (co-organizer)
- 1995 SONIC'95: Student Mini-Symposium On Interval Computations (SONIC'95), Houston, Texas, October 21–22, 1995 (chair, program committee)
- 1995 Applications of Interval Computations. International Workshop, El Paso, TX, February 1995 (chair, organizing committee).
- 1995 First SC COSMIC (South and Central Computational Science in Minority Institutions Consortium) Student Conference on Computational Science, Houston, TX, October 21–22, 1995 (member, program committee)
- 1994 NAFIPS/IFIS/NASA'94, San Antonio, TX, December 1994 (program committee; section chair).
- 1993 Third International Conference on Fuzzy Theory and Technology, November 1993 (program committee).
- 1993 Third International Conference on Industrial Fuzzy Control and Intelligent Systems, Houston, TX, December 1993 (panel chair).
- 1993 Second International Conference on Fuzzy Theory and Technology, October 1993 (program committee).

- 1993 5th University of Brunswick Artificial Intelligence Symposium, August 1993 (program committee).
- 1993 International Conference on Numerical Analysis with Automatic Results Verification, Lafayette, LA, February–March 1993 (program committee)
- 1993 Workshop on Interval Methods in Artificial Intelligence, Lafayette, LA, March–February 1993 (program committee).
- 1991 University of New Brunswick 4th Artificial Intelligence Workshop, 1991, (member of the Program Committee)

Refereeing for Journals:

- 2010–11 *ACM Transactions on Computational Logic*
- 2000–01 *ACM Transactions on Mathematical Software*
- 2010–11 *Advances in Fuzzy Systems*
- 1996 *American Mathematical Monthly*
- 1996–present *Annals of Mathematics and Artificial Intelligence*
- 2010 *Annals of Operations Research*
- 2005 *Applications of Mathematics*
- 2008 *Applied Mathematical Modelling*
- 2011 *Applied Mathematics and Information Science*
- 2008 *Artificial Intelligence Journal*
- 2015 *Applied Soft Computing*
- 1999 *Automatica*
- 2017 *Autosoft*
- 2003, 2007, 2010-11 *BIT*
- 2005 *Bulletin of the Malaysian Mathematical Sciences Society*
- 2009 *Central European Journal of Physics*

2010–11 *Chiang Mai Journal of Science*

2005 *Computational and Applied Mathematics*

2005 *Computational Statistics*

1999 *The Computer Journal*

2008 *Computer Methods in Applied Mechanics and Engineering*

1994–96 *Computers & Electrical Engineering*

1999–present *Computers & Mathematics with Applications*

2007 *Control and Cybernetics*

2003 *Cubo Matematica Educational*

2005, 2008 *Decision Support Systems*

2000–01 *Entropy*

2003 *Environmental Management*

2014 *Eurasian Mathematical Journal*

2003–04, 2006 *European Journal of Operational Research*

2006, 2015 *Fixed Point Theory and Applications*

2004 *Fundamenta Informaticae*

1999–present *Fuzzy Sets & Systems*

2005 *IEEE Transactions on Automatic Control*

2006 *IEEE Transactions on Biomedical Engineering*

1999 *IEEE Transactions on Circuits and Systems*

2005–06 *IEEE Transactions on Computers*

1992–present *IEEE Transactions on Fuzzy Systems*

1992–96, 2004, 2008–09, 2013–14 *IEEE Transactions on Neural Networks*

1999–present *IEEE Transactions on Systems, Man, and Cybernetics*

2006 *Indian Journal of Mathematics*

2012 *Information Fusion*

1999 *Information Processing Letters*

1999–present *Information Sciences*

2008 *International Journal of Applied Mathematics and Computer Science*

1990–present *International Journal of Approximate Reasoning*

1992–93 *International Journal of Artificial Intelligence Tools*

2005–06 *International Journal of Computational Intelligence Research*

2009, 2012 *International Journal of Control, Automation, and Systems*

2000–present *International Journal of General Systems*

2006 *International Journal of Information Technology & Decision Making*

1993–present *International Journal of Intelligent Systems*

2007 *International Journal of Intelligent Technologies and Applied Statistics*

2012 *International Journal of Math and Math Sciences*

2007–08, 2010 *International Journal of Reliability and Safety (IJRS)*

1992–97, 2005 *International Journal of Software Engineering and Knowledge Engineering*

2004 *International Journal of Systems Science*

1997–present *International Journal of Uncertainty, Fuzziness, and Knowledge-Based Systems (IJUFKS)*

1993–94 *Interval Computations*

2005 *Journal of Advanced Computational Intelligence & Intelligent Informatics (JACIII)*

2010 *Journal of Advances in Information Fusion*

2005 *Journal of Applied Analysis*

2003–04 *Journal of Applied Logic*

2001 *Journal of Applied Mathematics*

2010–11 *Journal of Engineering Mechanics*

1991–92 *Journal of Experimental and Theoretical Artificial Intelligence*

2006, 2009 *Journal of Global Optimization*

1992–present *Journal of Intelligent and Fuzzy Systems*

2003 *Journal of Logic and Algebraic Programming*

1992–96 *Journal of Logic and Computation*

1996–98 *Journal of Logic Programming*

2012 *Journal of Mechanical Design*

2002–03 *Journal of Reliability Engineering and System Safety*

1996 *Journal of Symbolic Logic*

1992, 2001 *Journal of Systems and Software*

1997 *Journal of Universal Computer Science*

2001, 2012 *Knowledge and Information Systems*

2003, 2006, 2009 *Linear Algebra and Its Applications*

1998, 2004 *Logic Journal of the Interest Group in Pure and Applied Logic (IGPL)*

2015 *Matematicki Vesnik*

2002–04, 2006 *Mathematical and Computer Modelling*

2011–12 *Mechanical Systems and Signal Processing*

2009 *Neural Network World*

2015 *Neural Networks*

1993–96 *Neural, Parallel, and Scientific Computations. Intl. Journal*

2000	<i>Publicationes Mathematicae Debrecen</i>
1995-present	<i>Reliable Computing</i>
2005	Reviews in Mathematical Physics
2001	<i>SIAM Journal on Computing (SICOMP)</i>
2005, 2011–12	<i>SIAM Journal on Matrix Analysis and Applications (SIMAX)</i>
2004–05	<i>Siberian Journal of Computational Mathematics</i>
1991–96	<i>SIGART Bulletin</i>
2002, 2007, 2009	<i>Soft Computing</i>
2013	<i>Structural and Multidisciplinary Optimization</i>
2001–04	<i>Studia Logica</i>
2010–11	<i>Symmetry</i>
2009–11	<i>Thailand Statistician</i>
2011	<i>Theoretical and Mathematical Physics</i>
2004, 2012	<i>Theoretical Computer Science</i>
2000	<i>Vietnam Journal of Mathematics</i>
1974–89,2003	<i>Zapiski: Proceedings of the St. Petersburg Mathematical Institute of the Russian Academy of Sciences</i>
1986–89	<i>Mathematics of the USSR. Izvestiya</i>
1986–89	<i>Measuring Techniques,</i>
1978–89	<i>Siberian Mathematical Journal</i>

Refereeing for Review Journals

A reviewer for *Computing Reviews*, *Mathematical Reviews* and *Zentralblatt fur Mathematik*; up to 1989 a reviewer of Soviet review journals *RZhMatematika* and *New Foreign Books*. Total number of published reviews more than 200 (> 150 in *Mathematical Reviews*); in 1986 awarded a “Reviewer Excellence” award from the *Computing Reviews*.

Refereeing Books

- 1995 J. Yen et al (eds.), *Industrial Applications of Fuzzy Logic and Intelligent Systems*, IEEE Press, 1995.

Refereeing for Publishers

CRC Press, IEEE Press, Imperial College Press, Kluwer Academic Publishers, Springer Verlag, World Scientific

Refereeing for Conferences (in addition to conferences where V. Kreinovich served on the program committee)

- 2017 Workshop on Engineering Applications WEA'2017, Cartagena, Colombia, September 27–29, 2017
- 2017 International Joint Conference on Neural Networks IJCNN'2017, Anchorage, Alaska, May 14–19, 2017
- 2016 International Conference of Numerical Analysis and Applied Mathematics ICNAAM'2016, Rhodes, Greece, September 19–25, 2016
- 2016 23rd Workshop on Logic, Language, Information and Computation WoLLIC'2016, Puebla, Mexico, August 16–19, 2016
- 2016 International Conference on Applied Statistics ICAS'2016, Phuket, Thailand, July 13–15, 2016
- 2016 11th IEEE Systems of Systems Engineering SoSE'2016, Kongsberg, Norway, June 12–16, 2016
- 2015 MatTriad'2015, Coimbra, Portugal, September 7–11, 2015
- 2015 Twelfth International Conference on Computability and Complexity in Analysis CCA'2015, Tokyo, Japan, July 12–15, 2015
- 2014 2014 IEEE Congress on Evolutionary Computation CEC'2014, Beijing, China, July 16–19, 2014
- 2014 Joint International Conference on Engineering Education and International Conference on Information Technology ICEE/ICIT'2014, Riga, Latvia, June 2–6, 2014
- 2012 World Automation Congress WAC'2012, Puerto Vallarta, Mexico, June 24–28, 2012

- 2012 IEEE Workshop on Engineering Applications WEA'2012, Bogota, Colombia, May 2–4, 2012
- 2011 9th International Conference on Parallel Processing and Applied Mathematics PPAM'2011, Torun, Poland, September 11–14, 2011
- 2011 International Conference on Nonlinear Mathematics for Uncertainty and Applications NLMUA'2011, Beijing, China, September 7–9, 2011
- 2011 The 8th Ershov Informatics Conference PSI'2011, Novosibirsk, Russia, June 27 – July 1, 2011
- 2010 49th IEEE Conference on Decision and Control CDC'10, Atlanta, GA, December 15–17, 2010
- 2010 10th International Workshop on State-of-the-Art in Scientific and Parallel Computing PARA'2010, Reykjavik, Iceland, June 6–9, 2010
- 2009 10th International Conference on Structural Safety and Reliability ICOSSAR'2009, Osaka, Japan, September 13–17, 2009
- 2008 13th International Conference on Fuzzy Theory and Technology FT&T'08, Shenzhen, China, December 15–20, 2008
- 2008 24th International Conference on Logic Programming ICLP'2008, Udine, Italy, December 9–13, 2008
- 2008 Sixth EUROMECH Nonlinear Dynamics Conference, St. Petersburg, Russia, June 30 – July 4, 2008
- 2008 Minisymposium on High Performance Computing Interval Methods Trondheim, Norway, May 13–16, 2008
- 2007 International Conference of Numerical Analysis and Applied Mathematics ICNAAM'2007, Corfu, Greece, September 16–20, 2007
- 2007 9th IFAC Workshop Adaptation and Learning in Control and Signal Processing ALCOSP'07, St. Petersburg, Russia, August 29–31, 2007
- 2007 2007 International Joint Conference on Neural Networks IJCNN'2007, Orlando, Florida, August 12–17, 2007
- 2007 International Symposium on Computational Aesthetics in Graphics, Visualization, and Imaging CAe'07, Banff, Alberta, Canada, June 20–22, 2007
- 2006 36th Annual Frontiers in Education Conference FIE'06, San Diego, California, October 28–31, 2006

- 2006 Special session on Uncertain/Control Systems and Reliable Numerics at the 6-th International Conference on Numerical Methods and Applications NM&A'06, Borovets, Bulgaria, August 20–24, 2006
- 2006 2006 International Joint Conference on Neural Networks IJCNN'2006, Vancouver, Canada, July 16–21, 2006
- 2006 21st National Conference on Artificial Intelligence AAI'06, Boston, Massachusetts, July 16-20, 2006
- 2006 29th Australasian Computer Science Conference ACSC'2006, Hobart, Tasmania, Australia, January 16–19, 2006
- 2005 Joint 4th Conference of the European Society for Fuzzy Logic and Technology (EUSFLAT) and 11th Rencontres Francophones sur la Logique Floue et ses Applications (LFA) EUSFLAT-LFA'2005, Barcelona, Spain, September 7–9, 2005
- 2005 28th Australasian Computer Science Conference ACSC'2005, Newcastle, New South Wales, Australia, January 31–February 3, 2005.
- 2004 9th Ibero-American Conference on Artificial Intelligence IBERAMIA'2004, Puebla, Mexico, November 22–26, 2004.
- 2004 WSEAS International Conference on Signal, Speech, and Image Processing ICOS-SIP, Izmir, Turkey, September 14–16, 2004.
- 2004 IEEE International Conference on Fuzzy Systems FUZZ-IEEE'2004, Budapest, Hungary, July 25–29, 2004.
- 2004 2004 International Joint Conference on Neural Networks IJCNN'2004, Budapest, Hungary, July 25–29, 2004.
- 2004 11th International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems IPMU'2004, Perugia, Italy, July 4–9, 2004.
- 2003 28th International Symposium on Mathematical Foundations of Computer Science MFCS'2003, Bratislava, Slovakia, August 25–29, 2003
- 2003 2003 International Joint Conference on Neural Networks, Portland, Oregon, July 20–24, 2003
- 2003 20th International Symposium on Theoretical Aspects of Computer Science STACS'2003, Berlin, February 27 – March 1, 2003.
- 2003 Dagstuhl Seminar 3041 on Numerical Software with Result Verification, Dagstuhl, Germany, January 19–24, 2003.

- 2002 9th International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems IPMU'2002, Annecy, France, July 1–5, 2002.
- 2002 IEEE International Conference on Fuzzy Systems FUZZ-IEEE'2002, Honolulu, Hawaii, May 12–17, 2002.
- 2001 31st Annual Frontiers in Education Conference FIE-2001, Reno, Nevada, October 10–13, 2001.
- 2000 AAAI Symposium on Answer Set Programming: Towards Efficient and Scalable Knowledge Representation and Reasoning, Stanford, CA, March 26–28, 2001.
- 2000 Mexican International Conference on Artificial Intelligence MICAI'2000, Mexico City, Mexico, April 10–14, 2000.
- 1999 38th IEEE Conference on Decision and Control CDC'99, Phoenix, Arizona, December 7–10, 1999.
- 1999 Workshop on Applications of Interval Analysis to Systems and Control with special emphasis on recent advances in Modal Interval Analysis MISC'99, Girona, Spain, February 24–26, 1999.
- 1998 Mexican Expert Systems Interval Conference (MEXICON'98), Workshop on Interval Computations and its Applications to Reasoning Under Uncertainty, Knowledge Representation, and Control Theory (in conjunction with the 4th World Congress on Expert Systems) Mexico City, Mexico, March 16–20, 1998.
- 1997 SCAN-97: GAMM/IMACS International Symposium on Scientific Computing, Computer Arithmetic and Validated Numerics, Lyon, France, September 10–12, 1997.
- 1997 International Joint Conferences in Artificial Intelligence IJCAI'97, Nagoya, Japan, August 23–29, 1997.
- 1997 IEEE International Conference on Fuzzy Systems, Barcelona, Spain, July 1–5, 1997.
- 1996 9th International Symposium on Artificial Intelligence/6th International Conference on Industrial Fuzzy Control and Intelligent Systems, ISAI/IFIS 96, Cancun, Mexico, November 12–15, 1996.
- 1996 JELIA'96 – Joint European Workshop on Logic in Artificial Intelligence, Evora, Portugal, September 30 – October 3, 1996.
- 1996 JICSLP'96 – Joint International Conference and Symposium on Logic Programming, Bonn, Germany, September 2–6, 1996.

- 1996 International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA'96), August 9–11, 1996, Sunnyvale, CA.
- 1995 Applications of Interval Computations. International Workshop, El Paso, TX, February 1995.
- 1995 Theories of Logic Programming, Non-Monotonic Reasoning, and their application to reasoning about Actions: The first Shell Oil Symposium, in honor of Michael Gelfond's 50th birthday, November 1995 (refereeing for the proceedings)
- 1993 IMACS-GAMM Intl. Workshop on Validated Computations, Oldenburg, Germany, August–September 1993 (refereeing for the Proceedings).
- 1993 5th International Conference on Tools with Artificial Intelligence, November 1993
- 1993 International Joint Conference on Artificial Intelligence IJCAI-93.
- 1992 North American Fuzzy Information Processing Society conference (NAFIPS'92), Puerto Vallarta, Mexico
- 1992 4th International Conference on Tools with Artificial Intelligence, November 1992
- 1992 Eighth Conference on Uncertainty in Artificial Intelligence, Stanford, CA, 1992
- 1992 International Fuzzy Systems and Intelligent Control Conference 92, Louisville, KY
- 1992 4th International Conference on Software Engineering and Knowledge Engineering, 1992
- 1991 7th Conference on Uncertainty in Artificial Intelligence, University of California at Los Angeles, 1991

Refereeing for Granting Agencies

- 2001, 2004–05, 2009–10 National Science Foundation (NSF)
- 2009, 2016 Canada Research Chairs (CRC)
- 2015 Swiss National Science Foundation (SNSF)
- 2014 Swedish Scientific Foundation
- 2013 South Africa's National Research Foundation (NRF)
- 2006, 2010–12 National Science and Engineering Research Council of Canada (NSERC)

2009, 2012 Netherlands Organisation for Scientific Research (NWO)

2005–08, 2010–11 Czech Science Foundations (formerly Grant Agency, Academy of Sciences of the Czech Republic)

2010 Swedish National Space Board (SNSB)

2010 US Department of Energy Office of Science

2003–04, 2009 Portuguese National Science Foundation (FCT)

2004–05, 2008–10 U.S. Civilian Research and Development Foundation (CRDF)

2007 Vienna Science and Technology Fund, Austria

2006 Ohio Supercomputer Center

2003–04 NASA

2004 Research Committee, City University of Hong Kong

2003 European Science Foundation (ESF)

2002 South African National Research Foundation (NRF)

2000 Science Foundation Ireland

1999 Israel Science Foundation

1993 International Science Foundation

1993 American Mathematical Society, Committee on Financial Support for former Soviet mathematicians