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Professor and Department Chair. Recipient of the Endowed Shigeko K. Chan Distinguished Professor in Mathematical Sciences.

EDUCATION

Ph.D., Mathematics, University of Buenos Aires.
Outstanding dissertation award. Graduation with highest honors, 1992.

M. Sc., Mathematics, University of Buenos Aires. Graduation with highest honors, 1987.

M. Sc., Physics, University of Buenos Aires. Graduation with highest honors, 1995.

AWARDS

Endowed Shigeko K. Chan Distinguished Professor in Mathematical Sciences 2012, University of Texas at El Paso.

College of Arts & Sciences Faculty Outstanding Achievement Award 2008, New Mexico State University.

Scientific Production Award, University of Buenos Aires 1993-1994-1995-1996.

Best PhD Dissertation Award, Period 1989-1994, University of Buenos Aires.

FACULTY POSITIONS

1. University Of Texas at El Paso

Professor and Chair, Department of Mathematical Sciences (2009 – current)

2. New Mexico State University

Professor (2007-2009)

Associate Professor (2005-2007)

Assistant Professor (2003-2004)

3. Purdue University

Visiting Professor of Statistics and Mathematics (2002-2003)

OTHER RESEARCH-TEACHING POSITIONS

1. University of Buenos Aires

Associate Professor (1998-2004)

Assistant Professor (1993-1997)

Teaching Assistant (1989-1992)

2. Conicet (Equivalent of NSF - Argentina)

Permanent Researcher (1995-2004)

3. Institute of Technology, National Atomic Energy Center, Buenos Aires

Professor (1998-2003)

RESEARCH FELLOWSHIPS

CONICET PhD Fellowship (1987-1992)

Postdoctoral Fellowships:

1. Organization of American States Fellowship (1997-1999)
2. Fonds National de la Recherche Scientifique, Belgium (1995)
3. International Centre for Theoretical Physics, Italy (1994-1995)

GRANTS

--NSF: Modeling High Frequency Data in Finance V, Co-PI (2013-2014)

--NSF: Modeling High Frequency Data in Finance IV, Co-PI (2012-2013)

--NSF: Modeling High Frequency Data in Finance III, Co-PI (2011-2012)

--NSF: Modeling High Frequency Data in Finance II, Co-PI (2010-2011)

- NSF DMS 0907371: Conference on Modeling High Frequency Data in Finance, Co-PI (2009)
- National Physical Science Consortium, PI (2007-2010)
- Minigrant from the College of Arts and Sciences, NMSU. PI (2007)
- NSF ADVANCE: Solutions to nonlinear problems arising in Physics and Finance, PI (2006-2007)
- New Mexico Chile Task Force through Economic Development Administration: Chile Industry System Analysis: Optimal harvest of Southwestern U.S. red chile peppers [*Capsicum annuum* (L.)], Co-PI (2004-2007)
- NSF ADVANCE: Numerical solutions to nonlinear problems arising in Physics and Finance, PI (2003-2005)
- Antorchas Foundation: Argentina - Germany cooperation (Deutscher Akademischer Austauschdienst) A-13622/1-5, PI (1999-2002)
- Argentina - Chile cooperation, Valparaiso University - University of Buenos Aires, Co-PI (2002-2003)
- Argentina - Chile cooperation, Santiago University - University of Buenos Aires CH/A99 - EIII/04, Secyt, PI (2000-2001)
- ``Resolution of nonlinear problems with applications" PEI 0013/97, CONICET, PI (1997)
- ``Resolution of Differential Equations by topological methods", UBACYT 197/95, PI (1995-1998)
- ``Resolution of Differential Equations by topological and variational methods" TX 045, UBACYT Co-PI (1998-2000)
- ``Resolution of Differential Equations by topological and variational methods" X 202, UBACYT PI (2001-2003)
- ``Analysis and nonlinear equations", PID 3668/92 CONICET Co-PI (1994-1996)
- ``Analysis and nonlinear equations", PMT-PICTO168 SECYT Co-PI (1997-2000)
- Antorchas Foundation, for organizing ``I International Meeting - Non Linear Equations and Free Boundary Problems", Argentina Co-PI (1997)
- National Agency of Science and Technology and International Mathematica Union, for organizing ``II International Meeting - Non Linear Equations and Free Boundary Problems", Argentina Co-PI (2000)

PRESENTATIONS (CONFERENCES/LECTURES/MEETINGS)

I have participated in 137 scientific meetings, 97 invited lectures in International Conferences and

Seminar talks in Universities and Institutions such as Universite Libre de Bruxelles; Universite Catholique de Louvain; Universita degli Studi di Padova; Courant Institute of Mathematical Sciences, NYU; Southwest Texas State University, San Marcos, Texas; University of Texas at Austin, Austin, Texas; Universitat Konstanz, Germany; Universita degli Studi di Catania, Sicilia; Universidad de Chile, Santiago; The University of Texas at San Antonio, San Antonio, Texas; Technical Universitat Berlin; The University of Houston Downtown; Purdue University, Indiana; The University of Minnesota, USA; Columbia University, New York; Comisión Nacional de Energía Atómica, Argentina; Instituto de Cálculo, University of Buenos Aires; Astrophysics Institute, Argentina; Universities of Mendoza, Tandil, Mar del Plata, Cordoba, Santa Fe, Argentina; Chemistry Department, University of Buenos Aires; IMPA, Brasil; University of Wisconsin Milwaukee; City University of New York; California State University; New Mexico State University; University of North Texas; Claremont Colleges, California; Indiana University, Bloomington; Florida State University, Tallahassee; The University of Texas at El Paso, Texas; Texas A&M; Trinity University, San Antonio, Texas; SAS Users group Conferences, San Antonio, Texas; University of New Mexico; Florida International University, Miami; Kent State University, Ohio, Middle Tennessee State University, Murfreesboro, Tennessee; Graduate Center, CUNY, NYC; Stevens Institute of Technology, NJ; Florida Atlantic University, Florida; Montana State University, Montana. 117 contributed conference talks in scientific meetings.

RESEARCH VISITS AND SEMINARS

- Universite Libre de Bruxelles, Faculte des Sciences, Departement de Mathematique, Belgium, 1995.
- Universite Catholique de Louvain, Belgium, 1995, 1999.
- Dipartimento di Metodi e Modelli Matematici per le Scienze Applicate, Universita degli Studi di Padova, Padova, Italy, 1995.
- Courant Institute of Mathematical Sciences, New York University, USA, 1996, 1997, 2000, 2001, 2002.
- Facultad de Ciencias Exactas y Naturales Universidad Nacional de Mar del Plata, Argentina, 1996.
- University of Texas at Austin, USA, 1998, 1999, 2000, 2001, 2002.
- Southwest Texas State University, San Marcos, Texas; USA, 1999.
- International Centre for Theoretical Physics, Trieste, Italy, 1994, 1995.
- Universidad Nacional del Litoral, Argentina 1997.
- Universidad Nacional de Cordoba, Argentina 1997.
- Technische Universitat Berlin, Germany, 1999.
- The University of Minnesota, USA, 2000.
- Universitat Konstanz, Germany, 2000, 2001.

- Universita di Catania, Sicilia, Italy, 2000.
- Universidad de Chile, Santiago, Chile, 2000.
- The University of Houston Downtown, Texas, 2001.
- The University of Texas at San Antonio, Texas, USA, 2001, 2002.
- Columbia University, USA, 2002, 2003, 2004, 2005, 2006, 2007.
- Kent State University, 2007.
- Graduate Center, CUNY, NYC, 2008.
- Stevens Institute of Technology, 2008, 2009, 2010, 2011, 2012, 2013.
- Florida Atlantic University, Florida, 2008.

TEACHING

Undergraduate: Calculus I, Calculus II, Multivariable Calculus, Introduction to Abstract Algebra, Linear Algebra, Probability and Statistics, Statistics, Differential Equations and Partial Differential Equations for Engineering and the Sciences, Differential Equations and Dynamical Systems for Engineering and the Sciences, Mathematics Appreciation (for Social Sciences), Mathematical Physics, Financial Mathematics.

Graduate: Differential Geometry, Real Analysis, Measure and Probability, Functional Analysis, Complex Analysis, Partial Differential Equations, Physics for mathematicians I and II, Fourier Series, Ordinary Differential Equations and Dynamical Systems, Numerical Analysis, Introduction to Math Finance, Financial Mathematics I and II, Financial Mathematics III: Optimization and Math Finance, Non Linear Equations and Free Boundary Problems, Resolution of Nonlinear Differential Equations by Variational Methods, Portfolio Optimization.

Highlights

I have been invited to Mainz University, Germany, to teach the course Optimization - Math Finance (I created this course) (about 13 lectures, 90min. each) during Summer 2003 and Summer 2004. I postponed the invitation.

I created a Professional Master in Financial Mathematics at New Mexico State University that was approved by the Governor of New Mexico Bureau of Finance and will begin in 2009. I created the courses Math 521/522 Financial Mathematics I and II, and Math 523 Numerical Optimization applied to Financial Mathematics that have been taught at the Department of Mathematical Sciences of New Mexico State University and are part of the core courses for the Master in Financial Mathematics. These courses are taught also for undergraduate students as Math 421/422/423 respectively.

The courses are intended for students of the College of Arts and Sciences, Engineering and Business who are interested in Financial Mathematics. The goal is to present the theory with great emphasis on applications. These courses are part of the core courses in the Master in Financial Mathematics.

I worked in the creation of the course Math 375G/Math 475 Business Applications at NMSU

Together with Professor Marco Avellaneda (Courant Institute of Mathematical Sciences, New York University) we organized a Master in Mathematical Finance at the Math Department of the University of Buenos Aires. I created the following courses at the Math Department of the University of Buenos Aires: Physics for mathematicians I and II, Introduction to Math Finance, Math Finance I and II, Optimization-Math Finance, Non Linear Equations and Free Boundary Problems, Resolution of Nonlinear Differential Equations by Variational Methods.

SUPERVISION

Post-doc advisees

1. M. Eydenberg, NMSU, 2009.
2. I. SenGupta, UTEP, 2010-2012.
3. K. Basu, UTEP, 2013-2015.

PhD Dissertations

- Dr. P. Amster. "Equations of mean curvature type", 1998, Math Department, University of Buenos Aires.
- Dr. M.M. Cassinelli. "General quasilinear elliptic second order problems", 2000, Math Department, University of Buenos Aires.
- Dr. P. De Napoli. "Nonlinear equations of the p-laplacian type", 2001, Math Department, University of Buenos Aires.
- Dr. C. Averbuj. "Black Scholes models: topological solutions", 2005, Math Department, University of Buenos Aires.
- Dr. J.P. Borgna. "Solutions to Differential Equations arising in Physics " 2006, Math Department, University of Buenos Aires.
- Dr. M. De Leo. "Existencia de soluciones para un problema de Schrodinger-Poisson" 2006, Math Department, University of Buenos Aires.
- Dr. Marc Salas. "Parabolic problems arising in financial mathematics and semiconductor physics" 2010, Department of Mathematical Sciences, New Mexico State University.
- Dr. Emmanuel Kengni Ncheuguim "Option pricing with transaction costs and stochastic volatility"

2011, Department of Mathematical Sciences, New Mexico State University.

MS students

- MS. M.M. Cassinelli. "Solutions to the mean curvature equation", 1996, Math Department, University of Buenos Aires.
- MS. P. De Napoli. "The mean curvature equation", 1997, Math Department, University of Buenos Aires.
- MS. C. Averbuj, "Nonlinear problems and applications to Economy ", 1997, Math Department, University of Buenos Aires.
- MS. D. Pinasco, "Resolution of differential equations by topological methods", 2000, Math Department, University of Buenos Aires.
- MS. J. Viegas, "Mathematical Models for Pricing Derivative Securities", 2001, Math Department, University of Buenos Aires.
- MS. M. Figueroa, "Critical Phenomena Models", 2001, Physics Department, University of Buenos Aires.
- MS. G. Negrin, "Fixed Point theorems and applications", 2001, Math Department, University of Buenos Aires.
- MS. I. Pisso, "Navier Stokes Equations", 2002, Math Department, University of Buenos Aires.
- MS. G. Kampel, "Black-Scholes with jumps models", 2002, Math Department, University of Buenos Aires.
- MS. N. Furman, "Intermittence, Scale Invariance and a new method to predict the behavior of major indices near a Crash", 2002, Physics Department, University of Buenos Aires.
- MS. E. Acosta, "Generalizations of the Black - Scholes model", 2003, Math Department, University of Buenos Aires.
- MS. M. Serrano, "American Options", 2003, Math Department, University of Buenos Aires.
- MS. Y. Liu, "Analysis of the behavior of major indices near a crash", 2005, Department of Mathematical Sciences, NMSU.
- MS. J. Jeschelnic, 2007, Department of Mathematical Sciences, NMSU.
- MS. E. Schoot, 2007, Department of Mathematical Sciences, NMSU.
- MS. A. Lagnaoui, 2007, Department of Mathematical Sciences, NMSU.

- MS I. Daraghmeh, 2008, Department of Mathematical Sciences, NMSU.
- MS V. Kumar Mani, 2008, Department of Agriculture and Home Economics, NMSU (Co-Advisor).
- MS. A. Vivas, 2008, Department of Mathematical Sciences, NMSU.
- MS. A. Bianchini, 2009, Department of Mathematical Sciences, NMSU.
- MS. V. M. Rajakaruna, 2010, Department of Mathematical Sciences, NMSU.
- MS. P. Bezdek, 2012, Department of Mathematical Sciences, UTEP.
- MS. A. Casillas, 2012, Department of Mathematical Sciences, UTEP.
- MS. R. Davis, 2012, Department of Mathematical Sciences, UTEP.
- MS. F. Biney, 2012, Department of Mathematical Sciences, UTEP
- MS. D. Canales, 2013, Department of Mathematical Sciences, UTEP
- Advisor of four graduate students who completed a Minor in Mathematics at New Mexico State University.
- Graduate Research Advising at New Mexico State University: I have been the advisor of the graduate student Yang Liu who had a Research Assistantship from ADVANCE – NSF for working in Mathematical Finance from July 2004 to July 2005.
- Undergraduate Research Advising at New Mexico State University: I was the advisor of the undergraduate student Allison White, who was awarded a fellowship from ADVANCE to do research in Mathematical Finance during 2005.
- Research Advising at the University of Buenos Aires: Juan Pablo Borgna (1996-2003), Jorge Alvarez Julia (1996-2001), Pablo Amster (1996-1998), Luis Fernández (1996-1998), Walter Feruglio (1997-1999), Mariano De Leo (1998-2003)

CONFERENCE AND SEMINAR ORGANIZATION

- 36th annual Texas Partial Differential Equations Conference, University of Texas at El Paso, 2013.
- Conference on Modeling High Frequency Data in Finance, 2009, 2010, 2011, 2012, 2013. This Conference was sponsored by the International Mathematical Union, American Statistical Association, Institute of Mathematical Statistics, Stevens Institute of Technology and New Mexico State University. The International Association of Financial Engineer endorsed the Conference. About 150 people attended the conference during 2009 and 2010, we expect the same in 2011. We have recently received a letter of congratulation from New Jersey representatives in the Congress.
- Co-Organizer of the weekly Stochastic Differential Equations seminar at the Department of Mathematical Sciences, NMSU, 2008-2009.

- Special Session in Financial Mathematics: The Mathematics of Derivative Securities and Structures, AMS 2010 Spring Western Sectional Meeting, Albuquerque, 2010.
- Special Session in Financial Mathematics: The Mathematics of Derivative Securities and Structures, AMS 2007 Fall Western Sectional Meeting, Albuquerque, 2007.
- Sponsor for the trip of the Department of Mathematical Sciences team for the 3rd Annual Arizona Mathematics Undergraduate Conference (AMUC) that was hosted by the Department of Mathematics & Statistics at Northern Arizona University in Flagstaff, Arizona, October 28-30, 2005.
- Special Session in Financial Mathematics: The Mathematics of Derivative Securities, AMS 2004 Fall Western Sectional Meeting, Albuquerque, 2004.
- Member of the Organizer Committee "XLIV Argentina Math Meeting", 1994.
- Member of the Organizer Committee of the Math Department Conferences, University of Buenos Aires, 1994 - 1995, 2001 - 2003.
- Member of the Organizer Committee "III Applied Math Meeting", Entre Rios, Argentina and Salto, Uruguay, 1995.
- Session Organizer EXPOCYTUBA, University of Buenos Aires, Argentina 1995.
- Member of the Organizer Committee I International Meeting - Non Linear Equations and Free Boundary Problems, Argentina, 1997.
- Session Organizer of "Academia de Ciencias Exactas, Fisicas y Naturales en la Feria del Libro" Argentina, 1998.
- Session Organizer XII University of Buenos Aires Research Fellows Meeting, 1998.
- Editor of Proc. I International Meeting - Nonlinear Equations and Free Boundary Problems, Argentina, 1998.
- Member of the Organizer Committee II International Meeting - Nonlinear Equations and Free Boundary Problems, Argentina 2000.
- Member of the Organizer Committee Matebaires, University of Buenos Aires, 2000.
- Session Organizer of XV University of Buenos Aires Research Fellows Meeting, 2001.
- Member of the Organizer Committee IV PAN-AMERICAN Workshop in Applied and Computational Mathematics, 2002.

PROFESSIONAL SOCIETIES

- American Mathematical Society

- Mathematical Association of America
- SACNAS
- International Federation of Nonlinear Analysts
- Unión Matemática Argentina
- New Mexico State University Hispanic Caucus.

PROFESSIONAL SERVICE

- Regular non-departmental member of the departmental promotion and tenure committee for the future Department of Sociology and Women's Studies at NMSU, 2009.
- Member of the Hiring committee, Department of Mathematical Sciences, NMSU, 2008-2009.
- Member of the Improvement of Instruction and Student Relations Committee of the College of Arts and Sciences, NMSU, 2008-2009.
- Member of the Graduate Council, NMSU, 2008-2009.
- Chair of the Departmental Promotion to Associate Professor and Tenure Committee, NMSU, 2007-2009.
- Reviewer of applications for the NM Alliance for Minority participation, 2006-2009.
- Judge at the New Mexico Alliance for Minority Participation Student Research Conference, 2006, 2007.
- Member of the Senate Scholastic Affairs Committee. New Mexico State University, 2007-2008.
- Member of the Plan2Plan taskforce for NMSU, 2007-2008.
- Mentor of Dr. K. Villaverde in the Mentoring program of ADVANCE, 2007-2008.
- Mentor of Dr. M. Castillo in the Mentoring program of ADVANCE, 2008-2009
- Panelist of the NSF program in Applied Mathematics, 2005, 2006.
- Panelist of the NSF program in Stochastic Systems, 2008.
- Member of the University Faculty Senate, New Mexico State University, 2005-2008.
- Member of the Senate Faculty Affairs Committee. New Mexico State University, 2005-2007.
- Member of the Graduate Council Interdisciplinary PhD programs Committee, 2007-

- Member of the Graduate Studies Committee, Department of Mathematical Sciences, New Mexico State University, 2005-2007.
- Member of the Outreach and Pi Mu Epsilon Committees, Department of Mathematical Sciences, New Mexico State University, 2005-2006
- Member of the Student Recruitment Committee, Department of Mathematical Sciences, New Mexico State University, 2005-2006.
- Member of the Development Committee, Department of Mathematical Sciences, New Mexico State University, 2005-2006.
- Member of the Undergraduate Curriculum Committee, Department of Mathematical Sciences, New Mexico State University, 2004-2005.
- Member of the Major and Minors Committee, Department of Mathematical Sciences New Mexico State University, 2003-2004, and 2005-2006.
- Worked with Professor Patricia Baggett in the Spanish version of the web page:
<http://www.math.nmsu.edu/breakingaway/>
- Judge in the New Mexico MESA On-Site Math Competition on Nov. 2007.
- Judge at the Graduate Research and Arts Symposium NMSU, two sessions, April 2006.
- Judge in charge in the New Mexico MESA On-Site Math Competition on Friday, Nov. 19th 2006.
- Member of several graduate students committees at New Mexico State University.
- Member of the Library Committee, Argentina Math Union 1988-1989.
- Member of the Habitat Committee, University of Buenos Aires, 1996.
- Member of the Graduate Studies Committee, Math Department, University of Buenos Aires, 1997-2000.
- Advisor of FOMEC 382 Math Department, University of Buenos Aires, 1997-1999.
- Member of Lecturers and Instructors Evaluation Committee, Math Department, University of Buenos Aires, 1997.
- Member of the Math Department Advisory Committee, University of Buenos Aires, 1997-2003.
- Member of the Faculty Senate, University of Buenos Aires, 1998-2003.
- Member of several PhD and Masters Committees, at the Math and Physics Departments, University of Buenos Aires.
- Executive Hiring Committee. Math Department, University of Buenos Aires, 1997-2002.

- Reviewer of the Natural and Exact Sciences Committee, CONICET, 1999-2002.
- Member of FOMEC Fellowship Committee, Math Department, University of Buenos Aires, 1998.
- Reviewer Research Incentive Program, University of Buenos Aires, 1999.
- Reviewer of Research Projects, Universidad Nacional de General Sarmiento, Argentina, 2001.

Editorial work for professional publications, and referee and review work

Editorial work

- Member of the Editorial Board of Australian Journal of Mathematical Analysis and Application (2006-current).
- Editorial Board Quantitative Finance, special issues (2010-current)
- Editorial Board Handbook in modeling high frequency data in finance, Wiley (2010-current)

Publications Reviewer

- Proceedings A
- International Journal of Mathematics and Mathematical Sciences
- International Journal of Non-Linear Mechanics
- Royal Society of Edimburgh
- Journal of Mathematical Analysis and Applications
- Applied Numerical Mathematics
- Studies in Applied Mathematics
- Mathematical Finance
- Finance and Stochastics
- Australian Journal of Mathematical Analysis and Applications
- Nonlinear Analysis
- Quantitative Finance
- Electronic Journal of Differential Equations
- International Journal of Computer Mathematics

- Computers & Mathematics
- Applied Mathematics Letters
- Proyecciones
- Neurocomputing
- Physica A
- Journal of Service Science and Management
- Revista de la Unión Matemática Argentina
- Ciencia Hoy
- Set-Valued Analysis

- **Reviewer**

1. American Mathematical Society

2. Zentralblatt

- Reviewed the Weintraub Differential Forms Textbook, Elsevier.

ADMINISTRATIVE EXPERIENCE

Chair, Department of Mathematical Sciences, University of Texas at El Paso (2009 – current)

Chair, graduate studies, New Mexico State University (2006 – 2009)

Chair of the Departmental Promotion and Tenure Sub-Committee, New Mexico State University (2007-2009)

Vice Chair of the NMSU Graduate Council (2007-2008)

Member of the NMSU President Plan2plan (2007-2008).

Acting Head, Department of Mathematical Sciences, NMSU, short periods (2006-2009).

LIST OF PUBLICATIONS

1. *H-Superficies : su contenido analítico y geométrico.* E. Lami Dozo, M.C. Mariani. *Proc. of the X National Math Meeting, IMAF, Argentina* 7 (1991) 73-82.
2. *H-systems with variable H.* E. Lami Dozo, M.C. Mariani, *Revista de la Unión Matemática Argentina* 37 (1991) 87-94.
3. *A Dirichlet problem for an H-system with variable H.* E. Lami Dozo, M.C. Mariani. *Manuscripta Mathematica* 81 (1993) 1-14.
4. *Soluciones de la ecuación de curvatura media prescrita.* E. Lami Dozo, M.C. Mariani. *Revista de la Unión Matemática Argentina* 39 (1994) 1-12.
5. *The prescribed mean curvature equation with Neumann condition.* E. Lami Dozo, M.C. Mariani. *Non Linear Analysis TMA* 22, 9 (1994) 1147-1152.
6. *El problema de Plateau para la ecuación de curvatura media prescrita.* M.C. Mariani. *Proc. of the First Analysis Meeting, Argentina, CLAMI* 17 (1992) 47-57.
7. *The Plateau problem for the prescribed mean curvature equation.* E. Lami Dozo, M.C. Mariani, *Revista Colombiana de Matemáticas. Vol. XXVII* (1993) 147-155.
8. *The prescribed mean curvature equation with constant boundary values.* E. Lami Dozo, M.C. Mariani. *Proc. of the Second Meeting "Dr. Antonio A. R. Monteiro" CONICET-UNS* (1993) 51-56.
9. *Solutions to the Plateau problem for the prescribed mean curvature equation via the Mountain Pass Lemma.* E. Lami Dozo, M.C. Mariani. *Studies in Applied Mathematics* 96 (1996) 351-358.
10. *The H-surface system with constant boundary values.* E. Lami Dozo, M.C. Mariani, *Revista de la Unión Matemática Argentina* 40 (1998) 1-12.
11. *The prescribed mean curvature equation for a revolution surface with Dirichlet condition.* A.L. Maestripieri, M.C. Mariani. *Bulletin of The Belgian Mathematical Society - Simon Stevin* 3 (1996) 257-265.
12. *An improvement in the determination of thermal properties of elastomeric compounds.* M.C. Mariani, M.P. Beccar Varela, A.J. Marzocca. *KGK Kautschuk Gummi Kunststoffe* 50 (1997) 39-42.
13. *Solutions to the mean curvature equation by fixed point methods.* M.C. Mariani, D. Rial, *Bulletin of The Belgian Mathematical Society - Simon Stevin* 4, 5 (1997) 617-620.
14. *Estimación de la dependencia de la difusividad térmica en elastómeros con la temperatura.* M.P. Beccar Varela, M.C. Mariani, A.J. Marzocca, D. Rial. *Proc. of the First Latinamerican Meeting of Mathematical Methods and Applications to Industry and Medicine.* (1995) 183-186.
15. *Resolution of equations of mean curvature type with variational and topological methods.* M.C. Mariani. *Proc. of the I International Meeting - Nonlinear Equations and Free Boundary Problems, Argentina* 1998.

16. Influence of the carbon black dispersion in the thermal diffusivity of SBR vulcanizates. S. Goyanes, M.P. Beccar Varela, M.C. Mariani, A.J. Marzocca. *Journal of Applied Polymer Sciences* 72 (1999) 1379-1385.
17. Existence and uniqueness of H-system's with Dirichlet conditions. P. Amster, M.C. Mariani, D. Rial, *Nonlinear Analysis* 42 (2000) 673-677.
18. Existencia y unicidad de soluciones para ecuaciones del tipo curvatura prescrita. P. Amster, M.C. Mariani. *Proc. of the VIII Math Meeting Capricornio, Chile* (1998).
19. Resolution of Semilinear Equations by Fixed Point Methods. P. Amster, M.C. Mariani. *Bull. Bel. Math. Soc.* 7 (2000) 215-220.
20. The prescribed mean curvature equation with Dirichlet conditions. P. Amster, M.C. Mariani. *Nonlinear Analysis* 44 (2001) 59-64.
21. Existence and regularity of weak solutions to the prescribed mean curvature equation for a nonparametric surface. P. Amster, M.M. Cassinelli, M.C. Mariani, D.F. Rial. *Abstract and Applied Analysis* 4, 1 (1999) 61-69.
22. Solutions to the prescribed mean curvature equation with Dirichlet conditions by variational methods. P. Amster, P. De Napoli, M.C. Mariani. *Proyecciones* 18, 2 (1999) 155-164.
23. Efecto del nivel de dispersión del negro de humo en las propiedades térmicas del SBR vulcanizado. S. Goyanes, M.P. Beccar Varela, M.C. Mariani, A.J. Marzocca. *Proc. of SAM 98, Iberomet V* (1998) 895-899.
24. Some mathematical properties of gauge transformations with respect to the Coulomb gauge: variational analysis of an energy functional. M.P. Beccar Varela, M. Ferraro, P. Lazzeretti, M.C. Mariani, D. Rial. *International Journal of Quantum Chemistry* 77 (2000) 599-606.
25. Solution to the mean curvature equation for nonparametric surfaces by fixed point methods. P. Amster, J.P. Borgna, M.C. Mariani, D.F. Rial. *Revista de la Unión Matemática Argentina* 41, 3 (1999) 15-21.
26. Solutions to general quasilinear elliptic second order problems. P. Amster, M.M. Cassinelli, M.C. Mariani. *Nonlinear Studies* 7, 2 (2000) 283-290.
27. Solutions to quasilinear equations by an iterative method. P. Amster, M.M. Cassinelli, M.C. Mariani. *Bull. Belg. Soc.* 7 (2000) 435-441.
28. Solutions of h-systems using the Green function. P. Amster, M.C. Mariani, D. Rial. *Bulletin of the Belgian Mathematical Society* 7 (2000) 487-492.
29. A boundary value problem for a semilinear second order ODE. P. Amster, M.C. Mariani, J. Sabia. *Revista de la Unión Matemática Argentina* 41, 4 (2000) 61-68.
30. A boundary value problem in the hyperbolic space. P. Amster, G. Keilhauer, M.C. Mariani. *Abstract and Applied Analysis* 4, 4 (1999) 249-253.
31. An iteration procedure for nonlinear boundary conditions. P. Amster, M.C. Mariani. *Revista de la Unión Matemática Argentina* 42, 1 (2000) 9-16.
32. Three solutions of some quasilinear equations near resonance. P. De Napoli, M.C. Mariani. *Electronic Journal of*

Differential Equations 2001 (2001) 131-140.

33. *Solutions to equations of p -laplacian type in Lorentz spaces.* P. De Napoli, M.C. Mariani. *Bull. Belg. Soc* 8 (2001) 469-477.

34. *Subsonic solutions to a one-dimensional non-isentropic hydrodynamic model for semiconductors.* P. Amster, M.P. Beccar Varela, A. Jungel, M.C. Mariani. *Journal of Mathematical Analysis and Applications* 258 (2001) 52-62.

35. *Existence results for the mean curvature equation.* P. Amster, M.C. Mariani. *Journal of Nonlinear Analysis. Series A, Theory and Methods* 47 (2001) 4845-4848.

36. *Dirichlet and periodic-type conditions for a Painleve II Equation.* P. Amster, M.C. Mariani, C. Rogers. *Journal of Mathematical Analysis and Applications* 265 (2002) 1-11.

37. *Solvability and uniqueness results for equations of mean curvature type.* P. Amster, M.C. Mariani. *Revista de la Unión Matemática Argentina* 42, 1 (2000) 75-83.

38. *A Fixed Point Operator for a Nonlinear Boundary Value Problem.* P. Amster, M.C. Mariani. *Journal of Mathematical Analysis and Applications* 266 (2002) 160-168.

39. *Local Existence of Solutions to the Transient Quantum Hydrodynamic Equations.* A. Jungel, M.C. Mariani, D.F. Rial. *Mathematical Models and Methods in Applied Science, M3AS* 12 (2002) 485-495.

40. *Multiple solutions of a stationary nonhomogeneous nonlinear Schrodinger equation.* P. Amster, J.P. Borgna, M.C. Mariani, D.F. Rial. *Revista de la Unión Matemática Argentina* 42, 2 (2001) 43-50.

41. *Topological methods for an option pricing model with stochastic volatility.* P. Amster, C. Averbuj, M.C. Mariani. *Proc. Dyces 2001 (II Reunión Internacional sobre Dinámica de Sistemas Socio-Económicos).*

42. *The effects of the assian crisis on emergent markets: critical phenomena model.* M. Figueroa, M.C. Mariani, M. Ferraro. *Proc. Dyces 2001. (II Reunión Internacional sobre Dinámica de Sistemas Socio-Económicos).*

43. *Solutions of a non isentropic hydrodinamic model for semiconductors by an iterative method.* P. Amster, M. C. Mariani. *Proc. of Semigroups of Operators, Theory and Applications. Second International Conference. Optimization Software Inc. New York-Los Angeles* (2002) 9-15.

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