Curriculum Vitae

Name	Michel Marie Chipot
Citizenship	Swiss, French
Postal address	Institut für Mathematik, Universität Zürich
	Winterthurerstrasse 190, CH-8057 Zürich
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Web	http://www.math.unizh.ch/chipot

Education

- D.E.A., University of Nancy I, 1972, (mention T.B.).
- Thèse de 3ème cycle, 1975, University of Nancy I: On a conjecture in the elasticplastic torsion problem.
- Thèse d'état, 1981, University of Paris VI: On some variational inequalities, flow in porous media (Advisor: H. Brezis).

Research Interests

- Variational inequalities
- Nonlinear problems
- Elliptic equations and systems
- Parabolic equations
- Calculus of variations
- Applications
- Numerical analysis.

Honor

Elected member of the European Academy of Sciences (2009).

Positions Held

- 1971–1976 Assistant (University of Nancy I)
- 1976–1977 Military service
- 1977–1983 Assistant/Maître Assistant (University of Nancy I)
- 1981–1982 Visiting Assistant Professor (Brown University, USA)
- 1983–1984 Visiting Associate Professor (University of Maryland, USA)
- 1984–1985 Research Associate (Institute for Mathematics and its Applications, University of Minnesota, Minneapolis, USA)
- 1985–1995 Professeur (University of Metz)
- 1987 Visiting Professor 6 months University of Minnesota
- 1987 Visiting Professor 1 semester Carnegie Mellon University
- 1990 Visiting Professor 7 months University of Minnesota
- 1992 Visiting Professor 1 semester Carnegie Mellon University
- 1995 Professor Ordinarius (University of Zürich)
- 2013 John Nelder visiting fellow, Imperial College, London, Visiting fellow, University of Oxford.
- 2017- 2020 Visiting Professor, USTC Hefei, China.
- 2023- Professor at unidistance.ch.

Ph.D Students directed

- G. Michaille, Prof., University of Montpellier. *Inéquations variationnelles fortement non linéaires et applications.* (Metz, March 1988).
- A. Feggous. Résultats d'unicité et de régularité pour certaines inéquations variationnelles fortement non linéaires. (Metz, June 1988).
- B. Brighi, Prof., University of Mulhouse. Sur quelques problèmes de calcul des variations et l'approximation de leur fonctionnelle relaxée. (Metz, December 1991).
- M. Bousselsal, Prof., Ecole Normale Supérieure d'Alger. *Etude de quelques problèmes de calcul des variations liés à la mécanique*. (Metz, June 1993).
- W. Li, Vice-Professor, University of Zhengzhou (China). Analyse numérique de problèmes non convexes à données au bord non linéaires. (Metz, July 1993).
- N. André, Maître de Conférence, University of Tours. Sur l'unicité de problèmes quasilinéaires elliptiques et de leurs approximations numériques. (Metz, Décember 1993).

- A. Lyaghfouri. Sur quelques problèmes d'écoulement dans les milieux poreux. (Metz, June 1994).
- F. Voirol. Etude de quelques équations elliptiques fortement non linéaires. (Metz, November 1994).
- B. Lovat, Prag, University of Nancy 2. *Etude de quelques problèmes paraboliques non locaux.* (Metz, November 1995).
- M. Amrani, BNP Maroc. Etude de la solution approchée de problèmes quasilinéaires et analyse d'un problème en théorie du signal. (Metz, November 1995).
- A. Ellatifi. Quelques résultats d'alloquation de fréquence en dimension 3 et étude de la régularité de la solution d'inéquations variationnelles non locales. (Metz, January 1996).
- A. Elfanni. Sur quelques questions d'analyse numérique relatives à des problèmes non convexes. (Metz, May 1996).
- A. Lyaghfouri. On some nonlinear problems of fluid flows through porous media. Dissertation, University of Zürich (1997).
- L. Kis. Perturbations du problème de Dirichlet (Metz, September 1998).
- A. Rougirel, Maître de Conférence, University of Poitiers. Sur une équation de la chaleur régulée par des termes non locaux. (Nancy, November 1999).
- S. Fouad. Sur quelques problèmes relatifs à la déformation d'une membrane élastique par des boules rigides. (Metz, November 1999).
- M. Djermoune. Explosion et extinction de la température dans les materiaux viscoplastiques thermo-adoucissants. (Metz, December 1999).
- V. Lécuyer. Etude analytique et numérique de problèmes oscillants en calcul des variations. (Metz, November 2000).
- A. Aissani. Sur la déformation d'un fil élastique et sur l'étude d'une équation intégro-différentielle. (Metz, December 2000).
- M. Siegwart. Nonlocal quasilinear parabolic problems. (Zürich, October 2003).
- Y. Xie. On asymptotic problems in cylinders and other mathematical issues. (Zürich, May 2006).
- C. Fitouri. On some equations of the Duffing type. (Zürich, February 2008).
- K. Yeressian. Spatial asymptotic behaviour of elliptic equations and variational inequalities. (Zürich, November 2010).
- P. Roy. Some results in asymptotic analysis and nonlocal problems. (Zürich, June 2013).
- T. Savitska Asymptotic Behaviour of Solutions of Nonlocal Parabolic Problems. (Zürich, February 2015).

Organisation of meetings

- (With P. Bénilan, L. C. Evans, M. Pierre), "International meeting on nonlinear elliptic and parabolic problems", Nancy, March 1988.
- Journées de Metz: In 1988, I created the "Journées de Metz". These 2-days meetings were taking place each 3 months or so. The different themes were:
 - 1. Free Boundary Problems (December 1988),
 - 2. Homogenization-Hyperelasticity (March 1989),
 - 3. Evolution Problems (June 1989),
 - 4. Calculus of Variations (December 1989),
 - 5. Hyperbolic Problems-Exact Controlability (March 1990),
 - 6. Numerical Analysis (June 1990),
 - 7. Fluid Flows (December 1990),
 - 8. Journées Spéciales Lorraine (December 1991),
 - 9. Phase Transitions (March 1992),
 - 10. Evolution Problems, Bifurcation, Stability (June 1992),
 - 11. Elliptic and Parabolic Problems (December 1992),
 - 12. Harmonics Maps-Ginzburg-Landau Energy, Liquid crystal-Superconductivity (March 1993),
 - 13. Homogenization and oscillations (June 1993),
 - 14. Dynamical Systems and Inertial Manifolds (December 1993),
 - 15. Calculus of Variations (November 1994),
 - 16. Fluid Flows (February 1995).

Proceedings of these conferences were edited by Longman under the heading *Progress in Partial Differential Equations: The Metz Surveys* # 1 (1991), # 2 (1993), # 3 (1994), # 4 (1996).

- (With D. Kinderlehrer and G. Vergara Caffarelli), *Calculus of Variations, hyperelasticity, crystals*, Trento, December 1989.
- Pont-à-Mousson meetings: In June 1991 I created and organised with the Universities of Basel and Saarbrücken, in Pont-à-Mousson, the first "European Conference on Elliptic and Parabolic Problems" (260 participants). The Proceedings of this meeting have been published by Longman.
- (With the University of Basel and the RWTH d'Aachen), the "Second European Conference on Elliptic and Parabolic Problems", Pont-à-Mousson, June 1994.
- (With H. Amann (Zürich), C. Bandle (Basel), F. Conrad (Nancy), I. Shafrir (Haifa)), the "Third European Conference on Elliptic and Parabolic Problems, Pont-à-Mousson, June 1997.
- I was member of the steering committee of the european programme *Mathematical Treatment of Free Boundary Problems*. In the framework of this programme I organised with P. Neittaanmäki (Jyväskylä, Finland) and M. Pierre (Nancy) a

Workshop in Metz in November 1993 on the theme *Shape Computation: Theory* and *Applications* and a second workshop in Delft in January 1994 with H. Van Duijn (Delft) and L. A. Peletier (Leiden) on the theme *Free boundary problems* in porous media flows.

- In the framework of the programmes of the European Science Foundation and the European Mathematical Society I coorganised the Conference: *Local Singularities of Solutions to Nonlinear and Singular PDE's*, (San Feliu de Guixols, Spain, September 1995).
- (With D. Hilhorst and W-M. Yin), a session on elliptic and parabolic problems in the "World Congress of Nonlinear Analysts" in Athens in July 1996.
- (With H. Amann (Zürich)), the first "University of Zürich Conference in Nonlinear Analysis" (Ittingen, Switzerland, 14-16 October 1996).
- (With G. Belletini (Pisa), G. Buttazzo (Pisa), J. Spreckels (Berlin)), a workshop on Variational Problems with Free Interface (Pisa, 20-22 February 1997).
- (With A. Bermúdez (Santiago), J. Rappaz, J. Descloux (Lausanne)), a workshop on Numerical Analysis of Free Boundary Problems (Ittingen, 12-14 October 1997).
- (With J.F. Rodrigues (Lisbon)), a special year on nonlinear analysis including 6 workshops (1999).
- (With D. Hilhorst), a session on elliptic and parabolic problems in the "World Congress of Nonlinear Analysts" in Catania in July 2000.
- In 2001, the fourth "European Conference on Elliptic and Parabolic Problems". This meeting was divided into two parts (Rolduc, June & Gaeta September).
- (With S. Sauter and C. Schwab) Workshop on numerical methods for PDE's with complicated structures (Zürich, June 2003).
- (With C-C Chen and C-S Lin) NTCS 2004, International conference on elliptic and parabolic problems: recent advances, (Hsinchu, Taiwan, February 2004).
- In 2004, the fifth "European Conference on Elliptic and Parabolic Problems", (Gaeta, May-June).
- Analyse non linéaire: Colloque en l'honneur de H. Brezis (Paris, Juin 2004).
- (With J. Escher) Nonlinear and parabolic problems: A special tribute to the work of H. Amann (Zürich, June 2004).
- (With H. Ninomiya) The Swiss-Japanese Seminar, (Zürich, December 2004).
- (With S. Sauter) Schweizer Numerik Kolloquium (Zürich, March 2005).
- (With C-C. Chen, C-S. Lin, D-H. Tsai) NTCS 2006, International conference on nonlinear analysis, (Hsinchu, Taiwan, November 2006).
- Coorganizer of ICIAM 2007, 16-20 July 2007.

- In 2009, the sixth "European Conference on Elliptic and Parabolic Problems", (Gaeta, May).
- In 2012, the seventh "European Conference on Elliptic and Parabolic Problems", (Gaeta, May).
- Workshop on nonlocal problems, in the framework of the European program "FIRST", (Zürich, December 2012).
- (With Y. Kabeya) The Swiss-Japanese Seminar, (Zürich, December 2012).
- In 2014, the eighth "European Conference on Elliptic and Parabolic Problems", (Gaeta, May).
- (With S. Sauter) Swiss Numerics Day 2014, (Zürich, April 25, 2014).
- (With D. Klatte) Arbeitsgemeinschaft Analysis : closing workshop (Zürich, May 28, 2015).
- (With A. Eismontaite, K. Pileckas, M. Skujus) Asymptotic Problems: Elliptic and Parabolic Issues, (Vilnius, Lithuania, June 1–5, 2015).
- (With I. Shafrir) New Trends in Nonlinear Elliptic Equations, (Banff, Canada, August 30-September 4, 2015).
- In 2016, the 9th "European Conference on Elliptic and Parabolic Problems", (Gaeta, May 23-27, 2016).
- In 2017, the "International Conference on Elliptic and Parabolic Problems", (Gaeta, May 22-26, 2017).
- In 2019, the "International Conference on Elliptic and Parabolic Problems", (Gaeta, May 20-24, 2019).
- (With I. Shafrir) Nonlocal Problems in Mathematical Physics, Analysis and Geometry, (Institute for Advanced Study in Mathematics (IASM) in Hangzhou, China, November 8 13, 2020, postpone September 15-20, 2024).
- Lead organiser of New Trends in Elliptic and Parabolic Equations, Banff International Research Station (Alberta, Canada), November 16 - 21, 2025.

Editing

Member of the editorial board of:

- The European Journal of Applied Mathematics, Cambridge University Press, (1990-2000).
- Advances in Mathematical Sciences and Applications, Gakkotosho, Japon.
- Journal of Convex Analysis, Heldermann Verlag, Berlin (1994-2020).
- Journal of Applied Analysis, (Poland).
- Rendiconti di Matematica, Roma (1995-2001).

- Advances in Differential Equations (1996-2015), (USA).
- Dynamics of Continuous, Discrete and Impulsive Systems, (Canada).
- Interfaces and free boundaries, (1999-2017), (EMS).
- Numerische Mathematik, (Springer).
- Asymptotic Analysis, (Netherlands).
- Ricerche di Matematica, (Italy).
- Journal of Inequalities and Applications, (2000-2014), (USA).
- Boundary value problems, (2000-2014), (USA).
- International Journal of pure and applied mathematical sciences, (India).
- Analysis and Applications, (Singapore).
- International Journal of Dynamical Systems and Differential Equations, (USA).
- International Journal of Pure and Applied Mathematics.
- Nonlinear Studies, (USA).
- Mathematics in Engineering, Science and Aerospace (MESA), Cambridge Scientific Publishers Ltd.
- Mathematics.
- Journal of Algerian Mathematical Society.
- Abstract and Applied Analysis (until 2017).
- Global Journal of Mathematics and Mathematical Sciences.
- International Journal of Mathematical Models and Methods in Applied Sciences.
- Chinese Journal of Mathematics (until 2018).
- International journal of differential equations and applications.
- Journal of Applied Physical Science International.
- International Mathematical Forum.
- Advances in Analysis.
- Research and Reports on Mathematics.

Editor in chief of the book Series :

Atlantis Studies in Differential Equations (Atlantis & Springer), 2011-2020.

Editor in chief of the book Series :

Frontiers in Elliptic and Parabolic Problems, Birkhäuser, 2020-.

Founder and chief editor of :

"Journal of Elliptic and Parabolic Equations"

Volume 1 (2015)

Volume 2-9 (2016-2023) - see http://www.orthogonal-editions.com/ and http://www.springer.com/birkhauser/mathematics/journal/41808.

Editor in the following proceedings:

- 1. Recent advances in nonlinear elliptic and parabolic problems. Pitman Research Notes in Mathematics Series # 208, (1989).
- 2. Progress in Partial Differential Equations: The Metz Surveys. Pitman Research Notes in Mathematics Series # 249, (1991).
- 3. Progress in Partial Differential Equations: Elliptic and parabolic problems. Pitman Research Notes in Mathematics Series # 266, (1992). (Vol 1 of the Proceedings of the First European Conference on Elliptic and Parabolic Problems (Pont-à-Mousson, June 1991)).
- Progress in Partial Differential Equations: Calculus of variations, applications. Pitman Research Notes in Mathematics Series # 267, (1992). (Vol 2 of the Proceedings of the First European Conference on Elliptic and Parabolic Problems (Pont-à-Mousson, June 1991)).
- Progress in Partial Differential Equations: The Metz Surveys # 2. Pitman Research Notes in Mathematics Series # 296, (1993).
- Progress in Partial Differential Equations: The Metz Surveys # 3. Pitman Research Notes in Mathematics Series # 314, (1994).
- Progress in Partial Differential Equations: Elliptic and parabolic problems. (Vol 1 of the Proceedings of the Second European Conference on Elliptic and Parabolic Problems (Pont-à-Mousson, June 1994)). Pitman Research Notes in Mathematics Series # 325, (1995).
- Progress in Partial Differential Equations: Calculus of variations, computations and applications. (Vol 2 of the Proceedings of the Second European Conference on Elliptic and Parabolic Problems (Pont-à-Mousson, June 1994)). Pitman Research Notes in Mathematics Series # 326, (1995).
- 9. Progress in Partial Differential Equations: The Metz Surveys # 4. Pitman Research Notes in Mathematics Series # 345, (1996).
- Progress in Partial Differential Equations. (Vol 1 of the Proceedings of the Third European Conference on Elliptic and Parabolic Problems (Pont-à-Mousson, June 1997)). Pitman Research Notes in Mathematics Series # 383, (1998).

- Progress in Partial Differential Equations. (Vol 2 of the Proceedings of the Third European Conference on Elliptic and Parabolic Problems (Pont-à-Mousson, June 1997)). Pitman Research Notes in Mathematics Series # 384, (1998).
- 12. *Elliptic and Parabolic Problems*. Proceedings of the Fourth European Conference on Elliptic and Parabolic Problems, Rolduc-Gaeta 2001, World Scientific, (2002).
- 13. Recent Advances in Elliptic and Parabolic Problems. Proceedings of an International Conference, Hsinchu (Taiwan), World Scientific, (2005).
- 14. Elliptic and Parabolic Problems: a special tribute to the work of Haim Brezis. Progress in PDE and their applications, Vol 63, Birkhaüser, (2005).
- 15. Nonlinear elliptic and parabolic problems: A special tribute to the work of H. Amann. Progress in PDE and their applications, Vol 64, Birkhaüser, (2005).
- 16. Recent advances on elliptic and parabolic issues. Proceedings of the 2004 Swiss-Japanese Seminar, World Scientific, (2006).
- 17. Recent advances in Nonlinear Analysis. Proceedings of an International Conference on Nonlinear Analysis, Hsinchu (Taiwan), World Scientific, (2008).
- Proceedings of the sixth European Conference on Elliptic and Parabolic Problems, Gaeta 2009, CPAA, vol 9, 5, (2010).
- 19. Proceedings of the sixth European Conference on Elliptic and Parabolic Problems, Gaeta 2012, ADE (2013).
- 20. Differential and Difference Equations with applications, Contributions from the International Conference on Differential & Difference Equations and Applications, (Springer 2013).
- Editor of the handbook of differential equation (Stationary Partial Differential Equations)

Jointly with P. Quittner (Bratislava) we edited a series of books -in the framework of the handbook on differential equations- dedicated to stationary problems:

(M. Chipot, P. Quittner Edts) Handbook of differential equations. Stationary differential equations, vol 1, Elsevier, (2004).

(M. Chipot, P. Quittner Edts) Handbook of differential equations. Stationary differential equations, vol 2, Elsevier, (2005).

(M. Chipot, P. Quittner Edts) Handbook of differential equations. Stationary differential equations, vol 3, Elsevier, (2006).

I continued the series alone:

(M. Chipot Edt.) Handbook of differential equations. Stationary differential equations, vol 4, Elsevier, (2007).

(M. Chipot Edt.) Handbook of differential equations. Stationary differential equations, vol 5, Elsevier, (2008).

(M. Chipot Edt.) Handbook of differential equations. Stationary differential equations, vol 6, Elsevier, (2008).

Invitations and communications to meetings

- Joint Symposium I.U.T.A.M./I.M.U. (Marseille, France, 1975).
- Symposium on free boundary problems (Pavia, Italy 1979).
- Free boundary problems, International Symposium (Montecatini, Italy, 1981).
- Congrès de mécanique (Marseille, France, 1981).
- Conferences of the A.M.S. (Durham, NH, USA, 1982).
- S.I.A.M. meeting (Stanford University, CA., USA, 1982).
- Journées d'analyse non linéaire (Lille, France, 1983).
- A.M.S. meeting (Louisville, KY., USA, 1984).
- Congrès d'analyse numérique (Puy Saint-Vincent, France, 1985).
- 2ème congrès franco espagnol d'analyse non linéaire (Paris, France, 1985).
- Journées d'analyse non linéaire de Villetaneuse (Villetaneuse, France, December 1986).
- Meeting on Volterra Integro-Differential Equations (Trento, February 1987).
- Congrès d'analyse numérique (Evian, France, 1988).
- Meeting on nonlinear parabolic equations (Visegrad, Hungary, May 1988).
- Problems in liquid crystals and multiphase crystals (Trieste, Italy, May 1989).
- Free Boundary Problems and Hysteresis (Trento, Italy, September 1989).
- Free boundary problems, (Montreal, Canada, June 1990).
- Mathematical Modelling in Lubrication, (Vigo, Spain, October 1990).
- International Workshop: Microstruture and Phase Transition (Minneapolis, MN., USA, November 1990).
- Congrès d'analyse numérique (Royan, France, May 1991).
- International Workshop: Calculus of Variations and Nonlinear Elasticity, (Cortona, Italy, May 1991).
- International conference: Free Boundary Problems in Continuum Mechanics, (Novosibirsk, Russia, July 1991).
- Models in Hysteresis (Trento, Italy, September 1991).
- Relaxation methods in irregular variational problems (Trieste, April 1992).
- Mathematical theory of nonlinear and inelastic material behaviour (Darmstadt, Germany, May 1992).

- Congrès d'analyse numérique (Vittel, France, May 1992).
- Continuum models for the microstructure of crystals (Edinburgh, U.K., June 1992).
- World congress of nonlinear analysts (Tampa, Fl., USA, August 1992).
- Nonlinear Mathematical Problems in Industry (Iwaki, Japan, November 1992).
- Nonlinear Analysis-Calculus of Variations (Perugia, Italy, May 1993).
- Calculus of Variations, Homogenization, and Continuum Mechanics (Marseille, France, June 1993).
- Mathematical Problems in Thermomechanics and Electromechanics (Covilha, Portugal, June 1993).
- Free Boundary Problems in Porous Media Flows, (Delft, Holland, January 1994).
- Energy Methods for Free Boundary Problems in Continuum Mechanics (Oviedo, Spain, March 1994).
- SIAM Meeting on Mathematics in Material Science, (Pittsburgh, PA., USA, April 1994).
- Congrès d'analyse numérique (Les Karellis, France, May 1994).
- G.D.R. Optimisation de formes (Besançon, France, September 1994).
- Nonlinear PDE's and Equations of Mathematical Physics, (Warsaw, Poland, November 1994).
- Banach Center Semester Nonlinear Analysis and Applications (Warsaw, Poland, December 1994).
- MECAMAT 95 (La Bresse, May 1995).
- Calculus of Variations and Nonlinear Elasticity, (Cortona, Italy, June 1995).
- ICIAM Meeting 95 (Hamburg).
- ESF Conference on Local Singularities of Solutions to Nonlinear and Singular PDE's, (San Feliu de Guixols, Spain, September 1995).
- Regularization Methods in Free Boundary Problems, (Faro, Portugal, January1996).
- Nonconvex optimization (Evora, Portugal, June 1996).
- World Congress of Nonlinear Analysts (Athens, July 1996).
- Free boundaries in thin film flows (Amsterdam, November 1996).
- Variational Problems with free interface (Pisa, February 1997).
- Variations of domains and free boundary problems in solid mechanics (Paris, April 1997).
- Free boundary problems in superconductivity (Spa, April 1997).

- SIAM Meeting on Mathematics in Material Science (Philadelphia, U.S.A., May 1997).
- Free Boundary Problems (Creta, June 1997).
- ENUMATH 1997 (Heidelberg, September 1997).
- Mathematical Treatment of Free Boundary Problems (Madeira, January 1998).
- Calculus of Variations and Related Topics (Technion, Haifa, March 1998).
- Recent Advances in Partial Differential Equations (Rome, May 1998).
- Congrès d'Analyse numérique (Arles, France, May 1998).
- 3D Modeling of Natural Objects (Nancy, France, June 1998).
- Singularities and interfaces in nonlinear PDE's (Marseille, CIRM, June 1998).
- Phase field models and surface effects (Cortona, September 1998).
- Martensitic phase transitions: aspect of material science, continuum mechanics and applied Mathematics (Hannover, September 1998).
- Workshop on Numerical Analysis of Free Boundary Problems (Braga, Portugal, November 1998).
- Workshop on "Nonlinear Parabolic Problems" (Lisbon, May 1999).
- Congrès d'Analyse numérique (Ax-Bonascre, France, May 1999).
- Advanced study institute on PDE's models of superfluidity, superconductivity and reactive flows (Cargese, June 1999).
- ICIAM 99 (Edinburgh, July 1999).
- Workshop on "Numerical methods for viscosity solutions and applications" (Heraklion, July 1999).
- Workshop on "New trends in the calculus of variations" (Lisbon, October 1999).
- Interphase '99 (Freiburg, Germany, October 1999).
- FBP '99 (Chiba, Japan, November 1999).
- Congrès d'Analyse Numérique (Port d'Albret, France, June 2000).
- SIMAI Meeting (Ischia, Italy, June 2000).
- Nonlinear partial differential equations (Ascona, June 2000).
- Third World Congress of Nonlinear Analysts (Catania, July 2000).
- Summer school on microstructures (Vienna, September 2000).
- Reaction-Diffusion Systems: Theory and Applications (Kyoto, February 2001).
- Workshop on singular limits of reaction-diffusion systems: Interfaces and spikes (Leiden, March 2001).
- First SIAM-EMS Conference. Applied mathematics in our changing world, Berlin, September 2001.

- Workshop on Regularity in PDE's, Lisbon, November 2001.
- Conference on Nonlinear Partial Differential Equations, University of Ryukoku, June 2002.
- 27th Sapporo Symposium on Partial Differential Equations, July 2002.
- International Conference on Nonlinear Partial Differential Equations, Theory and Applications, City University of Hong Kong, September 2002.
- Special EUCOR meeting in the honor of C. Bandle, Basel, July 2003.
- Seventh colloquium on the qualitative theory of differential equations, Szeged, July 2003.
- Workshop FBP, St Etienne, September 2003.
- Nonlinear partial differential equations, Alushta, Ukraine, September 2003.
- Nonlinear partial differential equations and their applications, Fudan university, Shanghai, November 2003.
- Variational methods and the Schrödinger equation, Lausanne, February 2004.
- International conference on elliptic and parabolic problems: recent advances, Hsinchu, Taiwan, February 2004.
- Fifth NorthEastern Symposium on Mathematical Analysis, Sapporo, February 2004.
- Journées de Metz: problèmes de frontière libre, Metz, April 2004.
- Fifth european conference on elliptic and parabolic problems: a special tribute to the work of H. Brezis, Gaeta, Juin 2004.
- Nonlinear elliptic and parabolic problems: a special tribute to the work of H. Amann, Zürich, Juin 2004.
- Global and geometric aspects in nonlinear PDE's, Yerevan, Armenia, October 2004.
- Partial Differential Equations and Applications, Ferrara, April 2005.
- Journées de Metz, Metz, April 2005.
- Colloque equations aux dérivées partielles non linéaires, Tipaza (Algeria), May 2005.
- Nonlinear Parabolic Problems, Helsinki, October 2005.
- AIMS' Sixth International Conference on Dyn. Systems, Diff. Equations and Applications, Poitiers, June 2006.
- International Conference on Differential Equations and Dynamical Systems, Suzdal (Russia), July, 2006.
- Third International Conference of applied mathematics and computing, Plovdiv (Bulgaria), August 2006.

- International Conference on Differential Equations dedicated to the 100th Anniversary of Yaroslav Borysovych Lopatynsky, September 2006, Lviv, Ukraine
- Conference on Applied Analysis on the Occasion of the 65th Birthday of D. Kinderlehrer, Pittsburgh, USA, October 2006.
- European conference on smart systems, Rome, October 2006
- International conference on nonlinear analysis, NTCS (Hsinchu, Taiwan, November 2006).
- Partial Differential Equations in Modern Mathematical Physics and Applied Mathematics, KACST (Riyadh, Saudi Arabia, February 2007).
- IUTAM Symposium on relation of shell, plate, beam and 3D models, Tbilisi, Georgia, April 2007.
- Fourth International Conference of applied mathematics and computing, Plovdiv (Bulgaria), August 2007.
- Workshop on Variational Methods for Nonlinear PDE and their Applications, Technion, Haifa, March 2008.
- Journées de Metz, PDE and variational methods in life sciences, April 2008.
- Colloque Numérique Suisse, April 2008.
- EPSRC Gregynog Workshop, Computation and Analytic Problems in Spectral Theory, 12-18 July 2008.
- International Conference on Differential Equations and Dynamical Systems, Suzdal (Russia), June 26-30, 2008.
- Parabolic and Navier-Stokes equations, Bedlewo, Poland, September 1-6, 2008.
- International conference dedicated to the 100th anniversary of the birthday of Sergei L. Sobolev, Novosibirsk, October 5-12, 2008.
- International conference on partial differential equations and applications in honour of Professor Philippe G. Ciarlet's 70th birthday, Hong Kong, December 5-8, 2008.
- Evolution Equations and Dynamical Systems, Conference on the occasion of the 60th birthday of Alain Haraux, Hammamet, Tunisia, March 23-27, 2009.
- Equations d'évolution non-linéaires, Congrès à l'occasion du soixantième anniversaire de Fred B. Weissler, IHP Paris, March 30-April 1, 2009
- Journées de Metz, Analytic and computational methods in multi-scale modelling and applications, April 2-4, 2009.
- International Conference Nonlinear Parabolic Problems in Honor of Herbert Amann, Bedlewo, Poland, May 10-16, 2009.
- 6th European Conference on Elliptic and Parabolic Problems, Gaeta, May 25-29, 2009.

- NPDE 2009, Catania, June 22-25.
- International Conference on Partial Differential Equations for the 60th birthday of Michel Chipot, Poitiers, February 18-21, 2010.
- Colloque Numérique Suisse, April 2010.
- 8th AIMS Conference on Dynamical Systems, Differential Equations and Applications, Dresden, May 25-28, 2010.
- Fronts and Interfaces in Science and Technology, Orsay, June 28-30, 2010.
- NPDE 2010, Dnipropetrovsk, Ukraine, September 6-11, 2010.
- Workshop on Ill-posed Problems, Università "La Sapienza", Rome, November 29-30, 2010.
- Blow-up and singularities, Comenius University, Bratislava, Slovakia, March 23-25, 2011.
- Multiscale methods and qualitative properties for differential operators. International conference on the occasion of Vasily V. Zhikov's 70th birthday, Napoli, Italy, May 6-7, 2011.
- Journée en l'honneur de Jerry Goldstein, Université de Poitiers, June 10, 2011.
- Nonlinear Models in Partial Differential Equations, An international congress on occasion of Jesus Ildefonso Diaz's 60th birthday, Toleddo, June 14-17, 2011.
- International Conference on Differential & Difference Equations, Department of Mathematics, Azores University Ponta Delgada, Portugal, July 4 8, 2011.
- International Skorobohat'ko Mathematical Conference, Drohobych, Ukraine, September 19-23, 2011.
- International Workshop on the Multiscale Modelling and Methods, Université de Saint Etienne, France, October 9-11, 2011.
- SIAM Conference on Analysis of PDE's, San Diego, California, November 2011.
- 7th European Conference on Elliptic and Parabolic Problems, Gaeta, May 21-25, 2012.
- Workshop on Nonlinear Partial Differential Equations on the occasion of the sixtieth birthday of Patrizia Pucci, Perugia, May 28-June 1, 2012.
- Parabolic and Navier-Stokes equations, Bedlewo, Poland, 2-7 September 2012.
- Workshop on Image Processing and Reaction-Diffusion, September 11-13, 2012, Mount Zion Hotel, Jerusalem, ISRAEL.
- International conference dedicated to the 120th anniversary of Stefan Banach, Lviv, Ukraine, 17-21 September 2012.
- 8ème Rencontre d'Analyse Mathématique et ses Applications, Tipaza (Algeria), November 2012.

- Reaction-Diffusion Systems with Gradient Structure, National and Kapodistrian University of Athens, March 18-21, 2013.
- 5th Women in Mathematics Summer School on Mathematical Theories towards Environmental Models, ICTP Trieste, May 2013.
- Calcul des variations et équations différentielles, conférence en l'honneur du 60ème anniversaire de Bernard Dacorogna, EPFL, Lausanne, June 2013.
- Symposium on Differential Equations and Difference Equations 2013, Bayrischzell, Germany, September 1-5, 2013.
- The Energy of Mathematics: Two Days in the Occasion of the 70th Anniversary of S.N. Antontsev, Madrid, UCM, November 11-12, 2013.
- New trends in Calculus of Variations and Partial Differential Equations, conference in the honor of C. Sbordone, Naples, November 21-23, 2013.
- Analysis days, conference in the honor of C. Bandle, Aachen, November 29-30, 2013.
- Fronts and Interfaces in Science and Technology : final meeting, Madrid, December 11-13, 2013.
- 8th European Conference on Elliptic and Parabolic Problems, Gaeta, May 26-30, 2014.
- International Conference on Free Boundary Problems: Theory and Applications, Cambridge, June 23-27, 2014.
- Classical Problems and New Trends in Mathematical Fluid Dynamics, on the occasion of K. Pileckas' 60th birthday, Ferrara, September 29 October 3, 2014.
- Recent Trends on Nonlinear Phenomena, Reggio Calabria, November 5-7, 2014.
- International Conference on Differential & Difference Equations and Applications, Amadora, Portugal, May 18 22, 2015.
- 2015 KAIST CMC Mathematical Biology Conference on Cross-diffusion, chemotaxis, and related problems, KAIST (Korea Advanced Institute of Science and Technology), Daejeon, Korea, July 8 -10, 2015.
- ICIAM 2015, Beijing, August 10-14, 2015.
- New Trends in Nonlinear Elliptic Equations, Banff, (Canada), August 30-September 4, 2015.
- Colloque EDP Normandie, Le Havre, (France), October 21-22, 2015.
- Methods of Real Analysis and Partial Differential Equations, Academia Pontaniana, Naples, November 3, 2015.
- 2nd Conference on Recent Trends in Nonlinear Phenomena, Università degli Studi "Parthenope", Naples, November 4-6, 2015.

- Workshop on Analysis, Geometry and Mathematical Relativity, Clayton, Victoria (Australia), February 22-26, 2016.
- New trends in Calculus of Variations, Accademia Nazionale dei Lincei, Rome, 27 May 2016.
- CNA Conference in honor of David Kinderlehrer's 75th birthday: "Topics in Applied Nonlinear Analysis: Recent Advances and New Trends", Carnegie Mellon University, July 18-20, 2016.
- International conference on nonlinear partial differential equations A celebration of Professor Norman Dancer's 70th birthday University of New England, Armidale, Australia, November 21-25, 2016
- ICMC Summer Meeting on Differential Equations, 2017 Chapter, São Carlos, Brazil, February 6-8, 2017.
- Phase Transitions Models, Banff, (Canada), April 30-May 5, 2017.
- International Workshop on Nonlinear Analysis, University Niccolò Cusano, Rome, May 19. 2017.
- Continuum physics: a rational approach, Brescia, Italy, May 25-27, 2017.
- International Conference on Differential & Difference Equations and Applications, Departamento de Cincias Exatas e Naturais, Military Academy Amadora, Portugal, June 5-9, 2017.
- CIMPA School, Khovd, Mongolia, July 17-28, 2017.
- 4th Conference on Recent Trends in Nonlinear Phenomena, Università degli Studi di Messina, Accademia Peloritana dei Pericolanti, September 18-20, 2017.
- Workshop on Dynamics of Parabolic Equations and Related Topics, USTC, Hefei, China, November 4-5, 2017.
- LIASFMA International Conference on Contemporary Applied Mathematics. Dedicated to Prof. Philippe G. Ciarlet on the occasion of his 80th birthday. May 7-11, 2018, Fudan University.
- PDE-day in honor of Pavol Quittner, Comenius University, Bratislava, 28. 6. 2018.
- SIMAI 2018, Sapienza Università di Roma, 2-6, July 2018.
- Two nonlinear days in Urbino 2018, Università degli Studi di Urbino Carlo Bo, 12-13, July 2018.
- Nonlinear PDE Days Frankfurt Giessen Karlsruhe Köln, Local and Nonlocal Problems in Geometry and Mathematical Physics, Goethe-Universität Frankfurt, August 22 - 23, 2018.
- 2018 China-Japan Workshop on Nonlinear Diffusion Problems, Shanghai, November 3-4, 2018.

- ICMC Summer Meeting on Differential Equations, 2019 Chapter, São Carlos, Brazil, 4-6 February 2019.
- 2019 Workshop on Nonlinear Reaction Diffusion Equations, Shaanxi Normal University, April 20, 2019.
- One Day Workshop on PDEs in honor of Umberto Mosco's birthday, May 28, 2019, University of Rome "La Sapienza".
- New perspectives in nonlinear PDE. A conference in honor of Professor Haim Brezis, June 2-6, 2019, Technion-Israel Institute of Technology.
- International Conference, Nonlinear Analysis, in Honor of Professor Herbert Amann's 80th Birthday, June, 11-14, 2019, Palazzone, Scuola Normale Superiore di Pisa, Cortona, Italy
- 4th Swiss-Japanese PDE seminar, September 2-5, 2019, I-site Namba, Osaka Prefecture University, Osaka, Japan.
- International Conference on Nonlinear Elliptic and Parabolic Equations with Applications Dedicated to Professor Yihong Du on the Occasion of His 60th Birthday, online October 28-31, 2021.
- Recent and New Perspectives in Nonlinear Analysis on the occasion of the retirement of Patrizia Pucci, Urbino, November 3-4, 2022.
- International Conference on Nonlinear Partial Differential Equations, A celebration of Professor Yihong Du's 60th birthday, Sydney, November 21-25, 2022.
- Winter Meeting in Lisbon Mathematics & Applications, CMAF, December 18-20, 2023.
- International Conference on Elliptic and Parabolic Problems: GAETA 2024 20-24.05.2024.

Invitations and lectures

- University of Metz.
- University of Nancy.
- University of Pavia (Italy), September 1979.
- Universidad Complutense Madrid (Spain), May 1980.
- University of Florence (Italy), June 1981.
- Brown University (Providence, RI, USA), year 1981-1982.
- Mathematic Research Center (Madison, WI, USA), April 1982.
- Northwestern University (Evanston, IL, USA), April 1982.
- School of mathematics (University of Minnesota, MN, USA), May 1982.
- Los Alamos Laboratory (New Mexico, USA), July 1982.

- Universidad Complutense Madrid (Spain), November 1982.
- University of Heidelberg (Germany), May 1983.
- University of Maryland (USA), year 1983-1984.
- University of Kentucky (KY, USA), November 1983.
- Washington University (Saint Louis, Missouri, USA), November 1983.
- Purdue University (IN, USA), January 1984.
- Indiana University (IN, USA), January 1984.
- Carnegie Mellon University (Pittsburgh, PA, USA), March 1984.
- Institute for Mathematics and its Applications, (Minneapolis, MN, USA), year 1984-1985.
- University of California at Santa Barbara (CA, USA), May 1985.
- Brown University (Providence, RI., USA), August 1985.
- Courant Institute New York (NY, USA), September 1985.
- Ecole Normale Supérieure, Rue d'Ulm, February 1986.
- University of Pisa (Italy), April 1986.
- University of Pavia (Italy), May 1986.
- Heriot-Watt University (Edinburgh, UK), May 1986.
- Collège de France, November 1986.
- University of Zürich, December 1986.
- University of Pisa (Italy), January 1987.
- University of Trento (Italy), February 1987.
- University of Roma (Italy), February 1987.
- Universidad Complutense Madrid (Spain), February 1987.
- Universidad Autonoma Madrid (Spain), February 1987.
- University of Lisbon (Portugal), February 1987.
- Institute for Mathematics and its Applications, University of Minnesota, (Minneapolis, MN, USA), spring 1987.
- University of Texas A&M (College Station, Texas, USA), May 1987.
- Brigham Young University (Provo, Utah, USA), May 1987.
- Carnegie Mellon University (Pittsburgh, PA, USA), fall 1987.
- University of Pittsburgh (Pittsburgh, PA, USA), fall 1987.
- Emory University (Atlanta, GA, USA), October 1987.
- University of California at Santa Barbara (CA, USA), November 1987.
- University of Kentucky (Lexington, KY, USA), November 1987.

- Institute for Mathematics and its applications, University of Minnesota, (Minneapolis, MN, USA), December 1987.
- University of Saarbrücken (Germany), January 1988.
- University of Trento (Italy), April 1988.
- University of Budapest (Hungary), May 1988.
- Oberwolfach (Germany), June 1988.
- University of Roma (Italy), July 1988.
- University of Trento (Italy), October 1988.
- University of Paris VI, November 1988,
- University of Basel (Switzerland), January 1989.
- University of Trento (Italy), February 1989.
- University of Saarbrücken (Germany), March 1989.
- University of Bonn (Germany), April 1989.
- University of Heidelberg (Germany), May 1989.
- Oberwolfach (Germany), July 1989.
- University of Pisa (Italy), July 1989.
- University of Florence (Italy), July 1989.
- Universidad Complutense Madrid (Spain), September 1989.
- Oxford University (UK), November 1989.
- University of Sussex (UK), November 1989.
- Université d'Alger (Algeria), November 1989.
- Ecole Normale Supérieure d'Alger (Algeria), November 1989.
- University of Trento (Italy), December 1989.
- University of Strasbourg, December 1989.
- University of Minnesota (Minneapolis, MN, USA), spring 1990.
- Georgia Institute of Technology, (Atlanta, GA, USA)), May 1990.
- University of California at Berkeley, (CA, USA), May 1990.
- Oberwolfach (Germany), July 1990.
- Universidad Complutense Madrid (Spain), October 1990.
- Banach Center (Warsaw, Poland), October 1990.
- I.M.A., University of Minnesota (Minneapolis, MN, USA), November 1990.
- Rice University (Texas, USA), November 1990.
- Ecole Polytechnique (France), December 1990.
- Heriot-Watt University (Edinburgh, UK), February 1991.

- University of Paris Sud, March 1991.
- University of Pisa (Italy), September 1991.
- Landis & Gyr Energy Management Inc., Zug (Switzerland), September 1991.
- University of Paris I, December 1991.
- University of Trento (Italy), January 1992.
- University of Lisbon (Portugal), February 1992.
- Ecole Polytechnique Fédérale de Lausanne (Switzerland), March 1992.
- University of Trento (Italy), April 1992.
- University of Pisa (Italy), April 1992.
- University of Jyväskylä (Finland), May 1992.
- Technische Hochschule Darmstadt (Germany), May 1992.
- University of Mulhouse, May 1992.
- Heriot-Watt University (Edinburgh, UK), June 1992.
- Technische Hochschule Aachen (Germany), June 1992.
- Oberwolfach (Germany), June 1992.
- University of Saarbrücken (Germany), July 1992.
- University of Kaiserslautern (Germany), July 1992.
- University of Syracuse (NY, USA), October 1992.
- Iwaki University (Japon), November 1992.
- Iowa State University (Ames, IO, USA), December 1992.
- Carnegie Mellon University (Pittsburgh, PA, USA), December 1992.
- University of Paris Sud, March 1993.
- University of Toulouse, April 1993.
- Istituto "M. Picone" (Roma, Italy), April-May 1993.
- University of Perugia (Italy), May 1993.
- Oberwolfach (Germany), June 1993.
- Banach Center (Warsaw, Poland), October 1993.
- University of Besançon, October 1993.
- Universidad Complutense Madrid (Spain), December 1993.
- University of Pisa (Italy), March 1994.
- University of Oviedo (Spain), March 1994.
- I.M.A., University of Minnesota (Minneapolis, MN, USA), April 1994.
- Carnegie Mellon University (Pittsburgh, PA, USA), April 1994.

- Oberwolfach (Germany), May 1994.
- University of Zürich (Switzerland), May 1994.
- I.A.C. (Rome, Italy), September 1994.
- University of Florence (Italy), September 1994.
- Banach Center (Warsaw, Poland), November 1994.
- Banach Center (Warsaw, Poland), December 1994.
- Oberwolfach (Germany), February 1995.
- ENS de Cachan, February 1995.
- University of Nancy I, April 1995.
- University of Prag, April 1995.
- University of Bratislava, April 1995.
- I.A.C. (Roma, Italy), June 1995.
- University of Perugia, (Italy), June 1995.
- Technion Haifa, (Israel), June 1995.
- University of Strasbourg, January 1996.
- University of Paris Nord, January 1996.
- Ecole Polytechnique Fédérale de Lausanne, February 1996.
- I.A.C. (Roma, Italy), May 1996.
- University of Freiburg (Germany), May 1996.
- University of Zürich, June 1996.
- Technion, Haifa, June 1996.
- Istituto "M. Picone" (Roma, Italy), June 1996.
- Escorial de Madrid (summer school, July 1996).
- Tata Institute (Bangalore, India), September 1996.
- Carnegie Mellon University (USA), September 1996.
- I.M.A., University of Minnesota (USA), October 1996.
- Ecole Polytechnique (France), November 1996.
- University of Trento (Italy), February 1997.
- University of Pavia (Italy), February 1997.
- University of Pisa (Italy), February 1997.
- University of Nancy I, February 1997.
- University of Covilha (Portugal), March 1997.
- Instituto Superior Técnico, Lisbon, (Portugal), March 1997.

- I.M.A., University of Minnesota, U.S.A., May 1997.
- University of California at Santa Barbara, U.S.A., May 1997.
- Carnegie Mellon University, U.S.A., May 1997.
- I.A.C. Roma, Italy, July 1997.
- University of Coimbra, Portugal, (summer school, September 1997.
- Oberwolfach (Germany, January 1998).
- University of Evora (Portugal, February 1998).
- Instituto Superior Técnico (Lisbon, February 1998).
- IMA, University of Minnesota (Minneapolis, March 1998).
- Carnegie Mellon University (Pittsburgh, March 1998).
- University of Cologne (April 1998).
- University of Santiago de Compostela (Spain, July 1998).
- I.A.C. (Roma Italy, September 1998).
- University of Roma "La Sapienza" (September 1998).
- University of Cergy Pontoise (January 1999).
- University of Paris Sud (January 1999).
- EPFL, Lausanne (February 1999).
- Technion, Haifa (February 1999).
- Oberwolfach (Geometric questions in PDE's, January 1999).
- Oberwolfach (Microstructures, April 1999).
- University of Paris VI (May 1999).
- University of Kiel (September 1999).
- University of Roma "La Sapienza" (September 1999).
- Carnegie Mellon University (September 1999).
- University of Paris VI (December 1999).
- University of Lisbon (February 2000).
- Georgia Institute of Technology, (Atlanta, GA, USA)), (March 2000).
- Carnegie Mellon University (Pittsburgh, March 2000).
- Penn State University (March 2000).
- Ecole Normale Supérieure d'Alger (Algeria), May 2000.
- RWTH Aachen, May, 2000.
- TU München, October 2000.
- Université de Marseille, November 2000.

- Université de Nancy 1, January 2001.
- University of Montpellier, January 2001.
- Academia Sinica, Taiwan, February 2001.
- University of Paris VI, March 2001.
- University of Saarbrücken (Germany), May 2001.
- Ecole Polytechnique (France), May 2001.
- Academia Sinica, Taiwan, August 2001.
- Carnegie Mellon University, February-March 2002.
- University of Strasbourg, April 2002.
- University of Hiroshima, April 2002.
- Normal Taiwan University, April 2002.
- National center for Theoretical Sciences, Hinshu, Taiwan, April 2002.
- National Chang Cheng University, Taiwan, May 2002.
- University of Tokyo, June 2002.
- University of Chiba, Japan, June 2002.
- Keio University, Japan, June 2002.
- Ryukoku University, Japan, June 2002.
- Waseda University, Japan, July 2002.
- Meiji University, Japan, July 2002.
- Hokkaido University, Japan, July-August 2002.
- IAC Roma, September 2002.
- Universidad Autonoma Madrid, Spain, October 2002.
- Universidad Complutense Madrid, Spain, October 2002.
- University of Bratislava, Slovakia, November 2002.
- Université de Poitiers, France, January 2003.
- Academia Sinica, Taiwan, February 2003.
- Normal Taiwan University, February 2003.
- City University of Hong Kong, March 2003.
- University of Nancy, May 2003.
- University of Mulhouse, May 2003.
- University of Roma I, June 2003.
- NCTS, Taiwan, August 2003.
- Chiba University, Japan, August 2003.

- University of Pittsburgh (USA), September 2003.
- Carnegie Mellon University, September 2003.
- Fudan University, Shanghai, March 2004.
- Ryukoku University, Japan, September 2004.
- Ehime University, Matsuyama, Japan, September 2004.
- Fudan University, Shanghai, September 2004.
- University of Shanghai, September 2004.
- Université de Reims, October 2004.
- Rutgers University, November 2004.
- Georgia Institute of Technology, (Atlanta, GA, USA)), March 2005.
- Emory University, (Atlanta, GA, USA)), March 2005.
- Carnegie Mellon University, March 2005.
- Université d'Amiens, April 2005.
- University of Lisbon, July 2005.
- University of Perugia, (summer school, August 2005).
- City University of Hong Kong, Septembre 2005.
- Chinese University of Hong Kong, Septembre 2005.
- Gangzhou University, Septembre 2005.
- University of Roma "La Sapienza", November 2005.
- RWTH Aachen, May 2006.
- EPFL Lausanne, June 2006.
- National Taiwan University, November 2006.
- University of Basel, December 2006.
- University of Paris Sud, March 2007.
- University of Vilnius (summer school in Druskininkai, June 2007).
- Carnegie Mellon University (Pittsburgh, PA, USA), September 2007.
- University of Toronto, Canada, October 2007.
- McMaster University, Canada, October 2007.
- IAC Rome, October 2007.
- CMAF Lisbon, October 2007.
- Waseda University, Tokyo, November 2007.
- Meiji University, Tokyo, November 2007.
- Ryukoku University, Japan, December 2007.

- Université de Rouen, December 2007.
- City University of Hong Kong, January 2008.
- University of Perugia, February 2008.
- Université de Poitiers, February 2008.
- Technion Haifa, (Israel), March 2008.
- EPFL Lausanne, April 2008.
- City University of Hong Kong, January 2009.
- Carnegie Mellon University, February 2009.
- University of Virginia, Charlottesville, February 2009.
- University of Giessen, (Germany), July 2009
- CNR Roma, September 2009.
- University de Campina Grande, Brazil, June 2010.
- University of João Pessoa, Brazil, June 2010.
- IMPA, Rio, Brazil, June 2010.
- Université de Nice, France, October 2010.
- ICTP, Trieste, Italy, October 2010.
- SISSA, Trieste, Italy, October 2010
- University of Bath, UK, November 2010.
- University of Swansea, UK, November 2010.
- Université de Rouen, December 2010.
- Carnegie Mellon University, February 2011.
- University of Paris 13, Mars 2011.
- University of Oum El Bouaghi, Algeria, April 2011.
- RWTH Aachen, May 2011.
- Yonsei University, Seoul, May 2011.
- Seoul National University, June 2011.
- Inha University, Korea, June 2011.
- University of Bratislava, Slovakia, October 2011.
- University of California at Santa Barbara, November 2011.
- University of Bath, UK, December 2011.
- Waseda University, Tokyo, January 2012.
- Meiji University, Tokyo, February 2012.
- University of Tokyo, February 2012.

- Tokyo Institute of Technology, February 2012.
- Université de Paris Sud, April 2012.
- Universidad de Chile (Santiago, Chile), June 2012.
- Universidad Catolica (Santiago, Chile), June 2012.
- Universidad Tecnica Federico Santa Maria (Valparaiso, Chile), June 2012.
- Technion Haifa, (Israel), September 2012.
- Carnegie Mellon University, January 2013.
- University of Cologne, January 2013.
- Imperial College, London, January-April 2013.
- University of Cyprus, March 2013.
- University of Oxford, April-June 2013.
- University of Vilnius, June and August 2013.
- Kazakh-British Technical University, Almaty, Kazakhstan, August 2013.
- University of Roma "La Sapienza", October 2013.
- University of Bath, UK, October 2013.
- Isaac Newton Institute for Mathematical Sciences, Cambridge, January-February 2014.
- University of Warwick, February 2014.
- University of Vilnius, February 2014.
- Yonsei University, Seoul, April 2014.
- University of Vilnius, June 2014.
- Isaac Newton Institute for Mathematical Sciences, Cambridge, June-July 2014.
- Carnegie Mellon University (Pittsburgh, PA, USA), August-September 2014.
- Purdue University (IN, USA), September 2014.
- Penn State University (PA, USA)), September 2014.
- Brunel University, UK, September 2014.
- University of Vilnius, November 2014.
- University of New England, Armidale (Australia), January 2015.
- University of Sydney, January 2015.
- Monash University, Melbourne, January 2015.
- University of Vilnius, February 2015.
- NYU Shanghai, March-April 2015.
- Fudan University, Shanghai, April 2015.
- East China Normal University, Shanghai, April 2015.

- University of Roma "La Sapienza", April 2015.
- University of Roma "La Sapienza", June 2015.
- Yonsei University, Seoul, June 2015.
- Seoul National University, July 2015.
- University of Vilnius, July 2015.
- Technion Haifa, (Israel), November 2015.
- Max Planck Institute, Leipzig, December 2015.
- Monash University, Melbourne, February 2016.
- Université de Paris Sud, March 2016.
- Universidad de Chile (Santiago, Chile), April 2016.
- University of Roma "La Sapienza", May 2016.
- CSE, Yonsei University, Seoul, June 2016.
- Seoul National University, June 2016.
- University of Seville, June 2016.
- University of Linköping (Sweden), September 2016.
- University of Roma "La Sapienza", October 2016.
- University of Sydney, November 2016.
- University of New England, Armidale, November 2016.
- University of Campinas, Brazil, February 2017.
- City University of Hong Kong, March-April 2017.
- Carnegie Mellon University (Pittsburgh, PA, USA), April 2017.
- University of Roma La Sapienza, May 2017.
- University of Science and Technology of China, Hefei, October-November 2017.
- Université de Lorraine, Metz, Janvier 2018.
- University of Science and Technology of China, Hefei, April-May 2018.
- Jiangsu Normal University, Xuzhou, April 2018.
- NYU Shanghai, May 2018.
- Nottingham University at Ningbo, China, May 2018.
- Università degli Studi di Napoli Federico II, 17-30, June 2018.
- University of Roma "La Sapienza", 2-11, July 2018.
- University of Science and Technology of China, Hefei, September-December 2018.
- Xi'an University of Technology, 10-15, September 2018.
- Jiangsu Normal University, Xuzhou, November 2018.

- Southeast University China, Nanjing, November 2018.
- Nottingham University at Ningbo, China, November 2018.
- Central China Normal University, Wuhan, China, December 2018.
- University of Campinas, Brazil, February 2019.
- RUDN University, Moscow, 11-15, March 2019.
- University of Science and Technology of China, Hefei, 25/03-26/04, 2019.
- Nottingham University at Ningbo, China, 4-6 April, 2019.
- Xi'an Jiaotong University, 19, April 2019.
- University of Roma "La Sapienza", May 2019.
- East China Normal University, 28-31 October 2019.
- Fudan University, 30 October 2019.
- Nottingham University at Ningbo, China, 3-5 November, 2019.
- South China Normal University, Guangzhou, 5-7 December 2019.
- Xi'an University of Technology, 9-11 December 2019.
- Xi'an Jiaotong University, 9-11 December 2019.
- Indian Institute of Technology (IIT)- Kanpur, November 2020, online.
- University of Roma "La Sapienza", 08-25 May 2022.
- Università degli Studi di Napoli Federico II, 18 May 2022.
- Institut Mittag-Leffler, 6-21 September 2022.
- SMRI, University of Sydney, 16-20 November 2022.
- Carnegie Mellon University, 30/11-4/12 2022.
- University of Pittsburgh, December 1, 2022.
- University of Warwick, June 6, 2023.
- City University of Hong Kong, June 14-27, 2023.
- Università degli Studi di Napoli Federico II, November 13-17, 2023.
- The Chinese University of Hong Kong, Shenzhen, 28/11-14/12, 2023.
- The polytechnic University of Hong Kong, December 14, 2023.
- CMAF, University of Lisbon, December 18-21, 2023.
- University of Roma "La Sapienza", 27 April-27 May 2024.

Publications

- [1] Convergence of solutions in problems of elastic plastic torsion of cylindrical bars. In: Lecture Notes in math. # 503 (Springer Verlag).
- [2] Sur la régularité lipschitzienne de la solution d'inéquations elliptiques. Journal de math. pures et appl. 57, (1978), p. 69–76.
- [3] Some results about an elastic-plastic torsion problem. Nonlinear analysis, T. M. A., 2, (1979), p. 261–269.
- [4] Sur la régularité de la solution d'inéquations variationnelles elliptiques. Comptes rendus Acad. Sciences Paris, 288, (1979), p. 543–546.
- [5] *Regularity for the two obstacle problem*. Proceedings on Free Boundary Problems (Roma 1980).
- [6] Méthodes de monotonie dans les problèmes non linéaires. Journées E.R.A. Nancy (1980).
- [7] (With J. Carrillo): Sur l'unicité du problème de l'écoulement à travers une digue. Comptes Rendus Acad. Sciences Paris, 292, (1981), p. 191–194.
- [8] (With J. Carrillo): On the dam problem. Journal of Differential Equations, 45, (1982), p. 234–271.
- [9] (With J. Carrillo): On the uniqueness of the solution of the dam problem. Dans: Free boundary problems, theory and applications, vol.1, Pitman Research Notes n^o 78, (1983), p. 88–97.
- [10] (With J. F. Rodrigues): On the steady state continuous casting Stefan problem with nonlinear cooling. Quaterly of Appl. Math., (1983), p. 476–491.
- [11] On the equations of age dependent population dynamics. Archives for Rat. Mech. and Analysis, 1, (1983), p. 13–25.
- [12] (With L. Edelstein): A mathematical theory of size distribution in tissue culture. Journal of math. biology, 16, (1983), p. 115–130.
- [13] (With J. K. Hale): Stable equilibria with variable diffusion. Proceedings of A.M.S. conferences (Durham, New Hampshire June 1982), Contemporary Mathematics, # 17, (1983), p. 209–214.
- [14] Equations non linéaires intervenant en dynamique des populations. Proceedings journées d'analyse non linéaire, Lille, (May 1983).
- [15] A remark on the equations of age-dependent population dynamics. Quaterly of Appl. Math. 42, (1984), p. 221–224.
- [16] (With T. Sideris): An upper bound for the waiting time for nonlinear degenerate parabolic equations. Transactions of the A.M.S., 288, 1, (1985), p. 423–427.

- [17] (With J. Carrillo): On nonlinear elliptic equations involving derivative of the nonlinearity. Proceedings of the Royal Society of Edinburgh, 100 A, (1985), p. 281–294.
- [18] (With G. Vergara-Caffarelli): The N membranes problem. Applied Math. and Optimization, 13, (1985), p. 231–249.
- [19] (With S. Kisler, M. Luskin and D. Perry): Elastohydrodynamical problems in magnetic recording. Proceedings du congrès d'analyse numérique, Puy St. Vincent, (1985).
- [20] (With M. Luskin): Existence and uniqueness of solutions to Reynolds' lubrication equation. S.I.A.M. Journal of Math. Analysis, 17, (1986), p. 1390–1399.
- [21] (With L.C. Evans): Linearization at infinity and Lipschitz estimates for certain problems in the calculus of variations. Proceedings of the Royal Society of Edinburgh, 102 A, (1986), p. 291–303.
- [22] (With D. Kinderlehrer et G. Vergara Caffarelli): Smoothness of linear laminates. Archives for Rat. Mech. and Analysis, 96, 1, (1986), p. 81–96.
- [23] (With M. Luskin): The compressible Reynolds lubrication equation. Dans: Metastability and incompletely posed problems, I.M.A. volume 3, Springer Verlag, (1987), p. 61–75.
- [24] Some results on the compressible Reynolds equation. Proceedings du colloque franco-espagnol d'analyse non linéaire Paris, December 1985, Pitman Research Notes # 155, Longman Edt., (1987), p. 79–90.
- [25] (With P. Eymard andt T. Tahani): Sur les fonctions propres de l'opérateur de Laplace-Beltrami dont le carré est fonction propre. Symposia Mathematica n^o XXIX, Acad. Press, (1988), p. 111–129.
- [26] On the Reynolds lubrication equation. Nonlinear Analysis, T. M. A., 12, 7, (1988), p. 699–718.
- [27] (With D. Kinderlehrer): Equilibrium configurations of crystals. Archives for Rat. Mech. and Analysis, 103, 3, (1988), p. 237–277.
- [28] (With F. B. Weissler): On the elliptic problem Δu − |∇u|^q + |u|^p = 0. In: Non-linear diffusion equations and their equilibrium states, W.M. Ni, L.A. Peletier, J. Serrin edts., Math. Sciences Research Inst. Publ. Vol 12, Springer Verlag, (1988), p. 237–244.
- [29] (With J. F. Rodrigues): Comparison and stability of solutions to a class of quasilinear parabolic problems. Proceedings of the Royal Society of Edinburgh, 110 A, (1988), p. 275–285.
- [30] (With V. Oliker): Sur une propriété des fonctions propres de l'opérateur de Laplace-Beltrami. Canadian Math. Bulletin, 32, 2, (1989), p. 129–139.

- [31] (With F. B. Weissler): Some blow up results for a nonlinear parabolic equation with a gradient term. S.I.A.M. Journal of Math. Analysis, 20, 4, (1989), p. 886– 907.
- [32] (With G. Vergara-Caffarelli): Viscoelasticity without condition at infinity. Proceedings of a meeting on Volterra integro-differential equations, Trento 1987. Pitman Research Notes # 190, Longman Edt., (1989).
- [33] (With G. Michaille): Uniqueness results and monotonicity properties for strongly nonlinear elliptic variational inequalities Annali della Scuola Norm. Sup. Pisa, Serie IV, 16, 1, (1989), p. 137–166.
- [34] (With A. Feggous et G. Michaille): Uniqueness results and monotonicity properties for variational inequalities associated with strongly nonlinear diagonal systems. Pitman Research Notes # 208, Longman Edt., (1989).
- [35] (With T. Sideris): On the Abelian Higgs Model. ZAMP Journal of Appl. Math. and Physics, 41, (1990), p. 105–113.
- [36] Estimate of the energy of deformation for an elastic crystal. Publication de l'Universidad Autonoma, Madrid.
- [37] Uniqueness results for some variational inequalities with application to the Reynolds equation. Nonlinear PDE's and their applications. Collège de France Seminar, Vol 10. Pitman Research Notes in Mathematics Series # 220, (1990), Longman Edt., p. 130–145.
- [38] (With M. Luskin): Existence of solutions to the elastohydrodynamical equations for magnetic recording systems. S.I.A.M. Journ. of Math. Analysis 21, 1, (1990), p. 1–17.
- [39] (With G. Michaille): Uniqueness results and monotonicity properties for the solution of some variational inequalities. Existence of a free boundary. Proceedings of a meeting on free boundary problems, Irsee (Germany), June 1987. Pitman Research Notes in Mathematics Series # 185, 186, (1990).
- [40] Hyperelasticity for crystals. European Journal of Applied Math., 1, (1990), p. 113–129.
- [41] (With G. Vergara-Caffarelli): Some results in Viscoelasticity theory via a simple perturbation argument. Rend. Sem. Mat. Univ. Padova, 84, (1990), p. 223–239.
- [42] (With G. Vergara-Caffarelli): Remark on G-convergence for nonsymmetric operators. Rendi Conti di Mat., Serie VII, Vol. 11, Roma, (1991), p. 61–66.
- [43] (With R. Kersner): On a critical threshold for nonlinear diffusion equations. Rev. Mat. de la Univ. Complutense de Madrid, 4, 1, (1991), p. 123–136.
- [44] (With G. Cimatti): A uniqueness result for the Thermistor problem. European Journal of Applied Math., 2, (1991), p. 97–103.

- [45] Numerical Analysis of Oscillations in Nonconvex Problems. Numerische Mathematik, 59, (1991), p. 747–767.
- [46] Numerical Analysis of Oscillations in Two Wells Problems. Progress in Partial differential Equations: The Metz Surveys. Pitman Research Notes in Mathematics Series # 249, Longman Edt., (1991), p. 131–145.
- [47] Singular perturbation problems for the compressible Reynolds lubrication equation. In Mathematical modelling in Lubrication, Publicacions da Universidade de Vigo, Spain, 1991.
- [48] (With M. Fila and P. Quittner): Stationary solutions, blow up and convergence to stationary solutions for semilinear parabolic equations with nonlinear boundary conditions. Acta Math. Univ. Comenianae, Vol LX, (1991), p. 35–103.
- [49] (With J. F. Rodrigues): On a class of nonlocal nonlinear elliptic problems. M²AN, 26, 3, (1992), p. 447–468.
- [50] (With G. Dal Maso): Relaxed shape optimization: the case of nonnegative data for the Dirichlet problem. Advances in Mathematical Sciences and Applications, Vol 1, 1, (1992), p. 47–81.
- [51] (With C. Collins): Numerical Approximations in Variational Problems with Potential Wells. SIAM J. of Numerical Analysis, 29, 4, (1992), p. 1002–1019.
- [52] On a class of nonlinear elliptic equations. Banach center Publications, volume 27, Warsaw, (1992), p. 75–80.
- [53] (With B. Brighi): Densités d'énergie et matériaux cristallins. Annales de la faculté des sciences de Toulouse, 6, Vol 1, 1, (1992), p. 15–24.
- [54] (With B. Brighi): Approximation in nonconvex problems. Proceedings of the Pont-à-Mousson meeting, Longman Edt. Pitman research notes in mathematics # 267, (1992), p. 150–157.
- [55] (With S. N. Antontsev): Some results on the Thermistor problem. Proceedings of the conference on Free-Boundary Problems in Continuum Mechanics, Novosibirks, July (1991). S.N. Antontsev, K.H. Hoffmann, M. Khludnev Edts., Birkhäuser, (1992), p. 47–57.
- [56] (With S. N. Antontsev): The Thermistor problem. Dokl. A. N. USSR. Vol. 324, 2, (1992), p. 309–313 (in russian).
- [57] (With J. Carrillo): The dam problem with leaky boundary conditions. Applied Math. and Optimization, 28, (1993), p. 57–85.
- [58] New remarks on the dam problem. Proceedings of the Montreal Meeting on Free Boundary Problems, Montreal, June 1990, Emerging applications in free boundary problems, Pitman Research Notes in Mathematics series # 280, J.M. Chadam and H. Rasmussen Edts., (1993), p. 2–12.

- [59] Approximations and Oscillations. Proceedings of the workshop: Microstructure and Phase Transition, Minneapolis, November 1990, I.M.A. Volumes Series # 54, (1993), Springer Verlag Ed..
- [60] Energy estimates for variational problems with nonhomogeneous boundary conditions. Proceedings of the meeting "Nonlinear mathematical problems in industry", November 1992, (Iwaki, Japon), H. Kawarada, N. Kenmochi and N. Yanagihara Edts. Gakuto International Series, Mathematical Sciences and Applications, Vol 2, (1993), p. 473–487.
- [61] (With G. Vergara Caffarelli): Un'osservazione sull'esistanza e la non unicità per un problema ellittico con condizioni al bordo non locali. Quaderno # 13, Istituto "Mauro Picone", Roma, (1993).
- [62] (With S. N. Antontsev): The Thermistor problem: Existence, Smoothness, Uniqueness, Blow up. SIAM J. Math. Analysis, 25, 4, (1994), p. 1128–1156.
- [63] (With B. Brighi): Approximated convex envelope of a function. SIAM J. of Numerical Analysis, Vol 31, 1, (1994), p. 128–148.
- [64] Energy Approximation. Bonner Math. Schriften, 239, (1994), p. 1–10.
- [65] (With W. Li): Variational problems with potential wells and nonhomogeneous boundary conditions. In "Calculus of variations, homogenization and continuum mechanics", G. Bouchitté, G. Buttazzo and P. Suquet Edts, Series on Advances in Mathematics for applied Sciences, World Scientific, Vol 18, (1994), p. 149-168.
- [66] (With S. N. Antontsev): Some results on heat flow in electric conductors. Proceedings of the World Congress of Nonlinear Analysts (Tampa, Florida, August 1992), Vol I, (1995), p. 57–65, Lakshmikantam edt., Walter de Gruyter, Berlin.
- [67] (With M. Bousselsal): Relaxation of some functionals of the calculus of variations. Archiv der Mathematik, 65, 4, (1995), p. 316–326.
- [68] (With C. Collins et D. Kinderlehrer): Numerical analysis of oscillations in multiple wells problems. Numerische Mathematik, 70, (1995), p. 259–282.
- [69] (With M. Iannelli et A. Pugliese): Age structure S-I-R epidemic model with intra-cohort transmission. In: Mathematical population dynamics, Volume I, Theory of epidemics, O. Arino et al. edts, Wuerz, (1995), p. 51–66.
- [70] Energy estimates for Lagrange finite elements. Atti del Seminario Matematico e Fisico dell'Università di Modena, XLIII, (1995), p. 307–316.
- [71] (With J. Bemelmans): On a variational problem for an elastic membrane supporting a heavy ball. Calculus of Variations and PDE's, 3, (1995), p. 447–473.
- [72] (With V. Lécuyer): Analysis and computations in the four-well problem. Gakuto International Series, Mathematics Sciences and Applications, Vol 2 (1995), p. 67–78.

- [73] (With A. Lyaghfouri): An existence theorem for an unbounded dam with leaky boundary conditions. Elliptic and Parabolic Problems, Pont-à-Mousson 1994, Pitman research notes in mathematics series # 325, (1995), p. 64–73.
- [74] The use of Young measures for constructing minimizing sequences in the calculus of variations. J. Appl. Analysis, 1, 1, (1995), p. 71–81.
- [75] (With N. André): A remark on uniqueness for quasilinear elliptic equations. Proceedings of the Banach Center, Vol 33, (1996), p. 9–18.
- [76] (With N. André): Uniqueness and nonuniqueness for the approximation of quasilinear elliptic equations. SIAM Journal of Numerical Analysis, Vol 33, 5, (1996), p. 1981–1994.
- [77] (With M. Fila et I. Shafrir): On the solution to some elliptic equations with nonlinear Neumann boundary conditions. Adv. Diff. Equ. 1,1, (1996), p. 91– 110.
- [78] (With F. Voirol): On a class of nonlinear elliptic problems with Neumann boundary conditions growing like a power. Zeitschrift für analysis und ihre Anwendungen, 14, (1995), 4, p. 853–868.
- [79] (With J. Bemelmans): Minimal energy for a free ball on an elastic membrane. Energy Methods in Continuum Mechanics, S.N. Antontsev, J.I. Díaz, S.I Shmarev Edts, Kluwer Academic Publishers, (1996), p. 22–30.
- [80] Computing microstructures. Journal de Physique VI, vol 6, (1996), p. 27–34.
- [81] (With A. Lyaghfouri): On the uniqueness of the solution of the dam problem with leaky boundary conditions. Progress in Partial Differential Equations, Pitman research notes in Mathematics Series #345, (1996), p. 175–186.
- [82] (With D. Kinderlehrer): Analysis and computation in nonconvex well problems. Zeitschrift für Andgewandte Mathematik und Mechanik, Vol 76, Suppl. 2, (1996), p. 393–396.
- [83] (With S. N. Antontsev): The Analysis of blow up for the Thermistor problem. Siberian Mathematical Journal, Vol. 38, 5, (1997), p. 827–841.
- [84] (With M. Rosati, R. March and G. Vergara Caffarelli): Analysis of a nonconvex problem related to signal selective smoothing. M³AS, Vol 7, n^o 3, (1997), p. 313– 328.
- [85] (With B. Lovat): Some remarks on nonlocal elliptic and parabolic problems. Nonlinear Analysis, Theory, Methods and Applications, 30, 7, (1997), p. 4619–4627.
- [86] (With I. Shafrir and G. Wolansky): On the solutions of Liouville systems. Journal of Differential Equations, 140, (1997), p. 59–105.
- [87] (With V. Lécuyer): A new scheme for quasiconvex optimization in Multiple-well problems. 8th European Conference on Numerical Mathematics and Advanced

Application, (ENUMATH 1997) - Bock and all Edits. World Scientific, 1998, p. 238-249.

- [88] (With M. Chlebík, M. Fila et I. Shafrir): Existence of positive solutions of a semilinear elliptic equation in ℝⁿ₊ with a nonlinear boundary condition. J. of Math. Anal. and Appl., 223, (1998), p. 429–471.
- [89] (With B. Brighi): Approximation of infima in the calculus of variations. J. of computational and applied Math., 98, (1998), p. 273–287.
- [90] (With A. Ellatifi): Regularity results for nonlocal variational inequalities. Communications in Applied Analysis, 2, 1, (1998), p. 1–9.
- [91] (With A. Elfanni): On the numerical analysis of some variational problems with nonhomogeneous boundary conditions. Japan Journal of Industrial and Applied Mathematics, 15, 3, (1998), p. 345–361.
- [92] (With J. Filo): An example of blowup for a degenerate parabolic equation with a nonlinear boundary condition. ZAA, 17, 1, (1998), p. 89–102.
- [93] (With A. Lyaghfouri): The dam problem for linear Darcy's laws and nonlinear leaky boundary conditions. Advances in Differential Equations, 3, 1, (1998), p. 1–50.
- [94] (With M. Ramaswamy): Semilinear elliptic problems with nonlinear boundary conditions. Differential Equation and Dynamical Systems, 6, 1/2 (1998), p. 51–75.
- [95] (With B. Brighi et E. Gut): Finite differences on triangular grids. Numerical Methods for PDE's, 14, 5, (1998), p. 567–579.
- [96] Sur la formation de microstructures et leur analyse numérique dans les problèmes à puits. C.R. Acad. Sci. Paris, t 326, Série I, (1998), p. 505–509.
- [97] (With S. Müller): Sharp Energy Estimates For Finite Element Approximations of Non-convex Problems. Proceedings of a IUTAM Symposium on Variations of Domains and Free-Boundary Problems in Solid Mechanics, P. Argoul, M. Frémond, Q.S. Nguyen Eds, Kluwer, (1999), p. 317–325.
- [98] (With B. Lovat): On the asymptotic behaviour of some nonlocal problems. Positivity, 3 (1999), p. 65–81.
- [99] (With B. Lovat): Existence and uniqueness results for a class of nonlocal elliptic and parabolic problems. Dyn. Contin. Discrete Impuls. Syst. Ser. A Math. Anal. 8 (2001), no. 1, p. 35-51.
- [100] The appearance of microstructure in problems with incompatible wells. Numerische Mathematik, 83, 1999, p. 325–352.
- [101] (With L. Kis): On some class of variational inequalities and their regularity properties. Commun. Appl. Anal. 6 (2002), no. 1, 27–48.

- [102] (With L. Kis): On a class of nonlinear singular perturbation problems. Asymptotic Analysis, 19, 1999, p. 317-341.
- [103] (With L. Kis): Existence results for monotone perturbations of the Dirichlet problem. Advances in Math. Sciences and Applications, 10, 1, (2000), p. 81-101.
- [104] (With R. March and D. Vitulano) Numerical analysis of oscillations in a nonconvex problem related to image selective smoothing. J. Comp. and Appl. Math., 136, (2001), no. 1-2, p. 123-133.
- [105] On the diffusion of a population partly driven by its preferences. Arch. Rat. Mech. Anal. 155, (2000), p. 237-259.
- [106] (With L. Molinet) Asymptotic behaviour of some nonlocal diffusion problems. Appl. Anal. 80 (2001), no. 3-4, 279–315.
- [107] Sur la continuité de la frontière libre pour une classe de problèmes bidimensionnels. C.R. Acad. Sci. Paris, t 330, Série I, (2000), p. 443–448
- [108] On the continuity of the free boundary in some class of two dimensional problems. Interfaces and free boundaries, 3, (2001), p. 81-99.
- [109] On some problems in dimension two having a continuous free boundary. In Free Boundary Problems, Theory and applications, N. Kenmochi edts, Gakuto Series vol 13 (2000), p. 37-44.
- [110] (With A. Aissani and S. Fouad) On the deformation of an elastic wire by one or two heavy disks. Archiv der Mathematik, 76, (2001), p. 467-480.
- [111] (With M.C. Muñiz) On some degenerate singular perturbation problems. Asymptotic Analysis, 24, (2000), p. 209-232.
- [112] (With A. Elfanni) Some remarks on nonuniqueness of minimizers for discrete minimization problems. J. Appl. Anal. 7 (2001), no. 2, 191–208.
- [113] (With A. Rougirel) On some class of problems with nonlocal source and boundary flux. Advances in Differential Equations, 6, (2001), p. 1025-1048.
- [114] (With A. Rougirel) Sur le comportement asymptotique de la solution de problèmes elliptiques dans des domaines cylindriques tendant vers l'infini. C.R. Acad. Sci. Paris, t 331, Série I, (2000), p. 435–440.
- [115] (With A. Aissani) On the equilibrium position of a square on an elastic wire. Journal of convex analysis, Vol 8, (2001), 1, p 171-195.
- [116] (With A. Rougirel) On the asymptotic behaviour of the solution of elliptic problems in cylindrical domains becoming unbounded. Communications in Contemporary Mathematics, Vol 4, 1, (2002), p. 15-44.
- [117] (With V. Lécuyer) Some microstructures in three dimensions. In Numerical methods for viscosity solutions and applications, M. Falcone, C. Makridakis Eds, World Scientific, (2001), p. 59-76.

- [118] (With A. Rougirel) On the asymptotic behaviour of the solution of parabolic problems in cylindrical domains of large size in some directions. Discrete an Continuous Dynamical Systems, Series B, 1, (2001), p. 319-338.
- [119] (With A. Rougirel) Remarks on the asymptotic behaviour of the solution to parabolic problems in domains becoming unbounded. Nonlinear Analysis, Vol 47, (2001), p. 3-11.
- [120] (With A. Rougirel) Local stability under changes of boundary conditions at a far away location. Proceedings of the Fourth European Conference on Elliptic and Parabolic Problems, Rolduc-Gaeta 2001, World Scientific, (2002), p. 52-65.
- [121] (With M. C. Muñiz) On a free boundary problem modelling the electrolysis of aluminium. Apl. Math. Opt. 47, (2003), p. 231-252.
- [122] (with D. Kinderlehrer and M. Kowalczyk) A Variational principle for moleculor motors. Meccanica, 38, (2003), p. 505-518.
- [123] (With N-H. Chang) On some model diffusion problems with a nonlocal lower order term. Chin. Ann. Math., 24B:2, (2003), p. 147-166.
- [124] (With N-H. Chang)) On some mixed boundary value problems with nonlocal diffusion. Advances in Math. Sciences and Appl., Vol 14, 1, (2004), p. 1-24.
- [125] (With M. Siegwart) On the asymptotic behaviour of some nonlocal mixed boundary value problems. Nonlinear Analysis and its Applications, to V. Lakshmikantam on his 80th birthday, (2003), p. 431-450, Kluwer Edt.
- [126] (With N-H. Chang) Nonlinear nonlocal evolution problems. RACSAM, Rev. R. Acad. Cien. Serie A. Mat., Vol 97 (3), (2003), p. 393-415.
- [127] (With V. Valente and G. Vergara Caffarelli) Remarks on a nonlocal problem involving the Dirichlet energy. Rend. Sem. Mat. Univ. Padova, 110, (2003), p. 199-220.
- [128] (With P. Quittner) Equilibria, connecting orbits and a priori bounds for semilinear parabolic equations with nonlinear boundary conditions. Journal of Dynamics and Differential Equations, 16, (2004), p 91-138.
- [129] (With S. Carillo and G. Vergara Caffarelli) A variational problem with nonlocal constraints. In: Waves and stability in continuous media: Proceedings of the 12th Conference on WASCOM 2003, Villasimius, Cagliari, Italy 1 - 7 June 2003 eds: R. Monaco, S. Pennisi, S. Rionero & T. Ruggeri, World scientific, 2004.
- [130] (With Y. Xie) On the asymptotic behaviour of the p-Laplace equation in cylinders becoming unbounded. In: Proceedings of International Conference: Nonlinear PDE's and their Applications, N. Kenmochi, M. Ôtani, S. Zheng Edts., Gakkotosho, (2004), p. 16-27..
- [131] (With D. Kinderlehrer and S. Hastings) Transport in a moleculor motor system. M²AN, Math. Model. Num. Anal. 38, (2004), 6, p. 1011-1034.

- [132] (With Y. Xie) On the asymptotic behaviour of elliptic problems with periodic data. C. R. Acad. Sci. Paris, Ser. I 339, (2004), p. 477-482.
- [133] (With S. Carillo and G. Vergara Caffarelli) The N-membrane problem with nonlocal constraints. J. Math. Anal. and Appl., vol 308, n.1, (2005), p. 129-139.
- [134] (With Y. Xie) Elliptic problems with periodic data: an asymptotic analysis, Journ. Math. Pures et Appl., 85 (2006), p. 345-370.
- [135] (With S. Zheng) Asymptotic behavior of solutions to nonlinear parabolic equations with nonlocal terms, Asymptotic Analysis, Vol 45, (2005), p. 301-312.
- [136] (With Y. Xie) Asymptotic behaviour of nonlinear parabolic problems with periodic data, Progress in PDE and their applications, Vol 63, Nonlinear elliptic and parabolic problems: A special tribute to the work of H. Brezis, (2005), p. 147-156, Birkhäuser.
- [137] (With O. Anza Hafsa) Numerical analysis of microstructures: the influence of incompatibility, Progress in PDE and their applications, Vol 64, Nonlinear elliptic and parabolic problems: A special tribute to the work of H. Amann, (2005), p. 211-225, Birkhäuser.
- [138] (With W. Gangbo and B. Kawohl) On some nonlocal variational problems, Analysis and Applications, Vol 4, 4, (2006), p. 345-357.
- [139] (With J.A. Alvarez, J. C. Garcia and M.C. Muñiz) On a singular perturbation problem for a class of variational inequalities, Journal for Analysis and its Applications, 27, (2008), p. 79-94.
- [140] (With A. Rougirel) On the asymptotic behaviour of the eigenmodes for elliptic problems in domains becoming unbounded, Trans. Amer. Math. Soc. 360 (2008), p. 3579-3602.
- [141] (WithA. Elfanni and A. Rougirel) Eigenvalues, eigenfunctions in domains becoming unbounded, Hyperbolic problems and regularity questions, trends in Mathematics, Birkhäuser, (2006), p. 69-78.
- [142] *Remarks on some class of nonlocal elliptic problems.* Recent advances on elliptic and parabolic issues, World Scientific, (2006) p. 79-102.
- [143] (With A. Lyaghfoury) The dam problem for non-linear Darcy's laws and nonlinear leaky boundary conditions. Mathematical Methods in the Applied Sciences, Vol. 20, (1997), p. 1045-1068.
- [144] (With S. Mardare) On a model of diffusion of population. Int. J. Dynamical Systems and Differential Equations, Vol. 1, No. 3, (2008), p. 177-190.
- [145] (With K. Okada) Asymptotic behaviour of solutions to nonlocal diffusion systems driven by systems of ordinary differential equations, Advances in Differential Equations, Vol 12, 8, (2007), p. 841-866.

- [146] (With S. Antonsev, and Y. Xie) Uniqueness results for equations of the p(x)-Laplacian type, Advances in Mathematical Science and Applications, Vol 17, 1, (2007), p. 287-304.
- [147] (With Y. Xie) Some issues on the p-Laplace equation in cylindrical domains, Proceedings of the Steklov Institue of Mathematics, 261, (2008), p. 287-294.
- [148] On some anisotropic singular perturbation problems, Asymptotic Analysis, 55 (2007), p.125-144.
- [149] (With I. Shafrir, V. Valente, G. Vergara Caffarelli) A nonlocal problem arising in the study of magneto-elastic interactions, Boll. del UMI, Series IX, 1, (2008), p. 197-223.
- [150] (With H. Brezis and Y. Xie) Some remarks on Liouville type theorems, proceedings of the international conference in nonlinear analysis, Hsinchu, Taiwan (2006), World Scientific Edt, (2008) p. 43-65.
- [151] (With I. Shafrir, V. Valente, G. Vergara Caffarelli) On a hyperbolic-parabolic system arising in magnetoelasticity, J. Math. Anal. Appl. 352 (2009) p.120-131.
- [152] (With K. Yeressian) Exponential rates of convergence by an iteration technique, C. R. Acad. Sci. Paris, Ser. I 346, (2008) p. 21-26.
- [153] (With S. Mardare) Asymptotic behaviour of the Stokes problem in cylinders becoming unbounded in one direction, J. Math. Pures Appl. 90, (2008), p. 133-159.
- [154] (With S. Antonsev) Anisotropic equations: uniqueness and existence results, Differential and Integral Equations Volume 21, Numbers 5-6 (2008), p. 401-419.
- [155] (With S. Mardare) On correctors for the Stokes problem in cylinders, proceedings of the conference on nonlinear phenomena with energy dissipation, Chiba, November 2007, P. Colli and all Edts, Gakuto International Series, Mathematical Sciences and Applications, Vol 29, Gakkotosho, (2008), p. 37-52.
- [156] Some Remarks on Anisotropic Singular Perturbation Problems, proceedings of IUTAM Symposium on the relations of shell, plate, beam and 3D models, Tbilisi, Georgia, April 2007, p. 91-100, Springer, (2008).
- [157] (With S. Guesmia) On the asymptotic behavior of elliptic, anisotropic singular perturbations problems, Comm. Pure Applied Anal., 8, 1, (2009), p. 179-194.
- [158] (With D. Hilhorst, D. Kinderlehrer, M. Olech) Contraction in L¹ for a system arising in chemical reactions and molecular motors, Differential Equations and Applications, 1, 1, (2009), p. 139-151.
- [159] (With S. Guesmia) Corrector for some asymptotic problems, Proceedings of the Steklov Institue of Mathematics, Vol 270, (2010), p. 263-277.

- [160] (With F. J. Corrêa) Boundary layer solutions to functional elliptic equations, Bulletin of the Brazilian Mathematical Society, 40 (3), (2009), p. 381-393.
- [161] (With S. Guesmia) On some anisotropic, nonlocal, parabolic singular perturbations problems, Applicable Analysis, Vol. 90, No. 12, (2011), p. 1775-1789.
- [162] (With S. Guesmia) On a class of integro-differential problems, Comm. Pure Applied Analysis, 9, 5, (2010), p. 1249-1262.
- [163] (With S. Antontsev and S. Shmarev) Uniqueness and comparison theorems for solutions of doubly nonlinear parabolic equations with nonstandard growth conditions, Communications on Pure and Applied Analysis, Volume 12, 4, (2013), p. 1527-1546.
- [164] (With S. Guesmia and A. Sengouga) Singular Perturbations of Some Nonlinear Problems, Journal of Mathematical Sciences, Vol 176, 6, (2011), p. 828-843.
- [165] (With K. Yeressian) On the asymptotic behavior of variational inequalities set in cylinders, DCDS, Series A, Vol 33, 11 & 12, (2013) p. 4875-4890.
- [166] (With K. Yeressian) On Some Variational Inequalities in Unbounded Domains, Boll. del UMI, (9), V, (2012), p. 243-262.
- [167] (With K. Yeressian) Asymptotic behaviour of the solution to variational inequalities with joint constraints on its value and its gradient Contemporary Mathematics 594, (2013), p. 137-154.
- [168] (With P. Roy and I. Shafrir) Asymptotics of eigenstates of elliptic problems with mixed boundary data on domains tending to infinity. Asymptotic Analysis 85, (2013), p. 199-227.
- [169] (With P. Roy) Existence results for some functional elliptic equations. Differential and Integral Equations, Volume 27, Number 3/4 (2014), p. 289-300.
- [170] (With C. Bandle) Large solutions in cylindrical domains. Advances in Mathematical Sciences and Applications, Vol 23, 2, (2013), p. 461-476.
- [171] (With T. Savitska) Nonlocal p-Laplace Equations Depending on the L^p Norm of the Gradient. Advances in Differential Equations, 19, 11/12 (2014), p. 997-1020.
- [172] (With José Antonio Carrillo and Yanghong Huang) On global minimizers of repulsive-attractive power-law interaction energies. Philos. Trans. R. Soc. Lond. Ser. A Math. Phys. Eng. Sci. 372 (2014), no. 2028, 20130399, 13 pp.
- [173] *l* goes to plus infinity : an update. J. KSIAM, vol 18, 2, (2014), p. 107-127.
- [174] (With S. Mardare) The Neumann problem in cylinders becoming unbounded in one direction. J. Math. Pures App. (9) 104 (2015), no. 5, 921-941.
- [175] (With A. Mojsic and P. Roy) On some variational problems set on domains tending to infinity. Discrete Contin. Dyn. Syst. Series A, Vol 36, 7 (2016), 3603-3621.

- [176] (With K. Kaulakyte, K. Pileckas and W. Xue) On Nonhomogeneous Boundary Value Problems for the Stationary Navier Stokes Equations in 2D Symmetric Semi-Infinite Outlets. Analysis and Applications, Vol. 15, No. 4 (2017), 543-569.
- [177] (With N. Kloviene, K. Pileckas and S. Zube) On a Non-Stationary Problem in an Infinite Periodic Pipe. Math. Nachr. (2016), 1-24.
- [178] On the resolution of quasi-linear elliptic equations in some unbounded domains. Proceedings of EDP-Normandie, 2015.
- [179] (With T. Savitska) Asymptotic Behaviour of the Solutions of Nonlocal p-Laplace Equations Depending on the L^p Norm of the Gradient. J. Elliptic Parabol. Equ. 1 (2015), 63-74.
- [180] (With Claudianor O. Alves and Francisco Julio S. A. Corrêa) On a Class of Intermediate Local-Nonlocal Elliptic Problems. Topological Methods in Nonlinear Analysis, Volume 49, No. 2 (2017), 497-509.
- [181] On the asymptotic behaviour of some problems of the calculus of variations. J. Elliptic Parabol. Equ. 1 (2015), 307-323.
- [182] (With S. Carillo, V. Valente and G. Vergara Caffarelli) A magneto-viscoelasticity problem with a singular memory kernel. Nonlinear Analysis: Real World Applications 35 (2017), 200-210.
- [183] Solenoidal extensions of vector fields in two-dimensional unbounded domains.
 C. R. Acad. Sci. Paris, Ser.I 354 (2016), 481-485.
- [184] (With K. Lee and J. K. Seo) Conductive fabric-based flexible pressure sensor. Appl. Math. Model. 48 (2017), 775-786.
- [185] (With J. Dávilla and M. del Pino) On the behavior of positive solutions of semilinear elliptic equations in asymptotically cylindrical domains. J. Fixed Point Theory Appl. 19 (2017), 205-213.
- [186] (With S. Guesmia and S. Harkat) On the minimal solution for some variational inequalities. J. Differential Equations 266 (2019), no. 1, 493-525.
- [187] (With S. Zube) On the asymptotic behaviour of the pure Neumann problem in cylinder-like domains and its applications. Asymptotic Analysis 108 (2018), 163-185.
- [188] (With S. Guesmia and A. Sengouga) Anisotropic Singular Perturbations of Variational Inequalities. Calc. Var. Partial Differential Equations 57 (2018), no. 1, Art. 7, 29 pp.
- [189] (With J. Droniou, G. Planas, J. C. Robinson and W. Xue) Limits of the Stokes and Navier-Stokes equations in a punctured periodic domain. Anal. Appl. (Singap.) 18 (2020), no. 2, 211–235.
- [190] (With L. De Cave) New techniques for solving some class of singular elliptic equations. Rend. Lincei Mat. Appl. 29 (2018), n°3, 487-510.

- [191] On some elliptic problems in unbounded domains. Chinese Annals of Mathematics, Series B, 39(3), (2018), 597-606.
- [192] On some stationary Navier-Stokes type problems. Nonlinear Anal. 177 (2018), part A, 288-298.
- [193] (With H.B. de Oliveira) Some results on the p(u)-Laplacian problem. Math. Ann. 375 (2019), n^o 1-2, 283-306.
- [194] (With W. Hackbusch, S. Sauter and A. Veit) Numerical approximation of Poisson problems in long domains. Vietnam J. Math. 50 (2022), n^o 2, 375-393.
- [195] On some singular nonlinear problems for monotone elliptic operators. Rend. Lincei Mat. Appl. 30 (2019), 295-316.
- [196] (with S. Carillo, V. Valente and G. Vergara Caffarelli) On weak regularity requirements of the relaxation modulus in viscoelasticity. Commun. Appl. Ind. Math. 10 (2019), n°1, 78-87.
- [197] (with S. Carillo, V. Valente and G. Vergara Caffarelli) Magneto-elasticity on the disk. Atti Accad. Peloritana Pericolanti Cl. Sci. Fis. Mat. Natur. 98 (2020), n^o 2, A,1-16. 74 (35)
- [198] (with M. Zhang) On Some Model Problem for the Propagation of Interacting Species in a Special Environment. DCDS-A, Volume 41, Number 7, July 2021, 3141-3161. doi: 10.3934/dcds.2020401.
- [199] On Inequalities of Korn's Type. J. Math. Pures Appl. (9) 148 (2021), 199-220.
- [200] On the Leray problem and the Poiseuille flow. Asymptotic Analysis 128 (2022) 337-350, doi: 10.3233/ASY-211708.
- [201] (with H. Mikayelyan) On some nonlocal problems in the calculus of variations. Nonlinear Anal. 217 (2022), Paper No. 112754, 17 pp.
- [202] On a Nonlocal-in-Time Parabolic Problem. Advances in Mathematical Sciences and Applications Vol. 31, No. 2 (2022), pp. 119-129.
- [203] Asymptotic behaviour of operators sum of p-Laplacians. Discrete and Continuous Dynamical Systems - Series S, Vol. 17, No. 2, (2024), pp. 917-929, doi:10.3934/dcdss.2023117.
- [204] On the sum of operators of p-Laplacian types. Accepted in in Commun. Math. Anal. Appl.
- [205] Asymptotic behaviour of some anisotropic problems. Accepted in Asymptotic Analysis.

Books

- [206] Variational Inequalities and Flow in Porous Media. Applied Math. Sciences Series n°52, (1984), Springer Verlag Edit.
- [207] Microstructures and Calculus of Variations. (Monografia, Univ. di Roma "La Sapienza", 2001).
- [208] Elements of Nonlinear Analysis. (2000), Birkhäuser.
- [209] ℓ goes to plus infinity. (2002), Birkhäuser.
- [210] Elastic deformations of membranes and wires, in: Three courses in PDE's (2003), Walter de Gruyter.
- [211] Elliptic Equations: An Introductory Course. (2009), Birkhäuser.
- [212] Mathematische Grundlagen der Naturwissenschaften. (2015), Springer Spektrum.
- [213] Asymptotic Issues for Some Partial Differential Equations. (2016), Imperial College Press.
- [214] Elliptic Equations: An Introductory Course, Second Edition. (2024), Birkhäuser.
- [215] Asymptotic Issues for Some Partial Differential Equations, Second Edition. (2024), World Scientific.