

1. Personal information

Name and surname: Ionel Roventă

Date and place of birth: December 24, 1982

Present academic position: Associate Professor, Department of Mathematics, University of Craiova, Romania(full time)

Current Address: University of Craiova, A.I. Cuza Street, No. 13, Craiova 200585, Romania

Phone number and e-mail address: 0721950817, e-mail: ionelroventa@yahoo.com

Web: <http://math.ucv.ro/~roventa/>

2. Education

2001-2005: Faculty of Mathematics and Computer Science, University of Craiova, Romania.

2005-2007: Master degree in Dynamical systems and evolution problems, Faculty of Mathematics and Computer Science, University of Craiova, Romania.

2005-2008: Ph. D. degree, Faculty of Mathematics and Computer Science, University of Craiova, Romania,

Ph. D. Thesis: Aspects of convexity in spaces with a curved geometry,

Advisor: Professor Constantin Niculescu.

3. Professional experience:

2005-2007: Junior Teaching Assistant, Faculty of Mathematics and Computer Science, Department of Mathematics, University of Craiova, Romania.

2007-2013: Teaching Assistant, Faculty of Mathematics and Computer Science, Department of Mathematics, University of Craiova, Romania.

2013-2015: Lecturer, Department of Mathematics, University of Craiova, Romania.

2015-present: Associate Professor, Faculty Sciences, Department of Mathematics, University of Craiova, Romania.

4. Ten selected publications:

1. C. P. Niculescu and I. Roventă, The Fan's inequality in metric spaces with nonpositive curvature, *Applied Mathematics Letters* 22 (2009), 1529-1533, ISSN 0893-9659.
2. A. Florea and I. Roventă, Some extensions of optimal Hardy's inequality using estimates of p-Laplacian, *Journal of Computational Analysis and Applications* 12 (2010), No. 3, 586- 592, ISSN 1521-1398.
3. C. P. Niculescu and I. Roventă, Generalized convexity and the existence of finite time blow-up solutions for an evolutionary problem, *Nonlinear Analysis: Theory, Methods & Applications* 75 (2012), 270-277, doi:10.1016/j.na.2011.08.031.
4. S. Micu and I. Roventă, Uniform controllability of the linear one dimensional Schrodinger equation with vanishing viscosity, *ESAIM: Control, Optimisation and Calculus of Variations*, 18 (2012), 277-293.
5. S. Micu, I. Roventă and M. Tucsnak, Time optimal boundary controls for the heat equation, *Journal of Functional Analysis*, 263 (2012), 25-49.
6. C. P. Niculescu, I. Roventă, Relative Convexity and Its Applications, *Aequationes Mathematicae*, Springer Basel 2015, DOI 10.1007/s00010-014-0319-x.

7. N. Cîdea, S. Micu, I. Roventă, Boundary controllability for finite-difference discretizations of a clamped beam equation, *SIAM J. Control. Optim. (SICON)* 55(2) (2017), 785-817.
8. M. Mălin, I. Roventă, M. Tudor, The convergence of a sequence of iterated polygons: a discrete combinatorial analysis, *Recent Progress in Difference Equations, Discrete Dynamical Systems and Applications, Springer Proceedings in Mathematics & Statistics (ICDEA 2017)*, 2018, 17 pages.
9. I. Roventă, L.E. Temereancă, A note on the positivity of the even degree complete homogeneous symmetric polynomials, *Mediterranean Journal of Mathematics*, accepted.
10. P. Lissy, I. Roventă, Optimal filtration for the approximation of boundary controls for the one-dimensional wave equation using a finite-difference method, *Math, Comp.* 88 (2019), 273-291.

5. **Research interests:** Convex functions, Functional Analysis, Control Theory.

6. **Prizes:** “Spiru Haret” Prize of the Romanian Academy in the domain of mathematical sciences, for paper “Particle supported control of a fluid-particle system”, 2017

Award for scientific results of papers published in 2017 by CNCS for the paper D.Y. Gao, P. Neff, I. Roventă, C. Thiel, On the convexity of nonlinear elastic energies in the right Cauchy-Green tensor, *Journal of Elasticity* (2017), 127(2)(2017), 303-308.

Award for scientific results of papers published in 2017 by CNCS for the paper C.P. Niculescu, I. Roventă, Hardy Littlewood-Polya theorem of majorization in the framework of generalized convexity, *Carpathian Journal of Mathematics* 33(1) (2017), 87-95.

Award for scientific results of papers published in 2012 by CNCS for the paper S. Micu and I. Roventă, Uniform controllability of the linear one dimensional Schrodinger equation with vanishing viscosity, *ESAIM: Control, Optimisation and Calculus of Variations*, 18 (2012), 277-293.

7. **Other academic activities:**

Stage to Universite Clermon Auvergne, Laboratoire de mathematics Blaise Pascal, February 1-18, 2018, supported by CNCS-UEFISCDI research project PN-III-P1-1.1-MC-2017-2433.

Stage to City University of Hong-Kong, May 29-June 12, 2017, supported by CNCS-UEFISCDI research project PN-II-RU-TE-2014-1109.

Stage to Universite Henri Poincare Nancy 1, Institute Elie Cartan, Nancy, France, 8-19 November, 2011, supported by Laboratoire Europeen Associe CNRS Franco-Roumain, LEA MATH-MODE Mathematiques and Modelisation, 2011.

First Romanian Itinerant Seminar on Mathematical Analysis and its Applications (RISMAA), Babes-Bolyai University, Romania, 19-21 April, 2018, Optimal filtration for approximation of controls, invited talk.

7th Workshop on Partial Differential Equations, Optimal Design and Numerics, August 20-September 1, 2017, Benasque, Spain, communication with the title “Approximation of boundary controls for the wave equation”, contributed talk.

Emerging trends in Applied Mathematics and Mechanics, ETAMM 2016, May 30-June 3, Perpignan France, Approximation of the controls for hinged clamped beam equations, contributed talk.

Director of the CNCS-UEFISCDI research project: Controllability and optimization problems, project number: PN-II-RU-TE-2014-4-1109. Team members: Ionel Dumitrel Ghiba, Nicolae Cindea, Laurentiu Emanuel Temereanca, Maria Malin, Ionela Loredana Stancut

Director of the CNCS-UEFISCDI research project: Numerical methods for controls of partial differential equations, PNII Grant, Capacitati Brancusi, Modul III, Bilateral project Romania-France, project number PN-II-CT-RO-FR 2012-1-1005, Nr. 700/19.04.2013, CF-128.19.04.2013. Members of the French team: Nicolae Cindea, Arnaud Munch. Members of the Romanian team: Florin Ioan Bugariu, Sorin Daniel Micu, Ionel Roventa.

Member of the CNCS research project: Mathematical methods applied in the study of mechanical systems, project number: PN-II-RU-TE-2014-4-0320. Director: Ionel Dumitrel Ghiba.

CURRICULUM VITAE

VICENȚIU D. RĂDULESCU

HIGHLIGHTS

1. Education:

Ph.D.: Université Pierre et Marie Curie (Paris 6), 1995. Advisor: Haim Brezis (awarded with the highest distinction: *très honorable avec félicitations*)

Habilitation: Université Pierre et Marie Curie (Paris 6), 2003. Advisor: Haim Brezis

2. Main Positions:

Professorial Fellow, Mathematics Institute of the Romanian Academy

Full Professor, University of Craiova, Romania

3. Distinctions:

“Simion Stoilow” Prize of the Romanian Academy (1999)

Distinguished Foreign Professor, University of Ljubljana, Slovenia (2008)

Best Associate Editor of the *Journal of Mathematical Analysis and Applications* (2009)

Member of the *Accademia Peloritana dei Pericolanti* from Messina, founded in 1729 (since 2014)

Honorary Director, Institute of Mathematics of the Heilongjiang Institute of Technology, Harbin, China (since 2014)

In 2014, I became a *Highly Cited Researcher* (Thomson Reuters)

The Chinese Academy of Sciences and Thomson Reuters included me in the 2014 list of *The World's Most Influential Scientific Minds 2014*

Distinguished Adjunct Professor, King Abdulaziz University, Jeddah, Saudi Arabia (2014-2017)

Senior Research Fellow, City University of Hong Kong (2015)

Member of the *Accademia delle Scienze dell'Umbria* from Perugia, Italy (since 2017)

According to Google Scholar, I have 6774 citations and my Hirsch Index is 44. According to MathScinet, I am cited 4085 times by 1319 authors and my Hirsch Index is 35. My most cited paper has 286 citations (Google Scholar) and 181 citations (MathScinet).

4. Editorial Activities:

Member of the Editorial Board of the Academic Press *Mathematics in Science and Engineering* Book Series (Elsevier);

Editor-in-Chief and founder of *Advances in Nonlinear Analysis* (Walter de Gruyter);

Editor-in-Chief of *Boundary Value Problems* (Springer);

Associate Editor of *Nonlinear Analysis: Theory, Methods and Applications* (Elsevier), *Journal of Mathematical Analysis and Applications* (Elsevier), *Mathematical Methods in the Applied Sciences* (Wiley), *Complex Variables and Elliptic Equations* (Taylor & Francis), *Advances in Pure and Applied Mathematics* (de Gruyter), *Discrete and Continuous Dynamical Systems-S* (AIMS),

Electronic Journal of Differential Equations, Opuscula Mathematica (AGH University), *Journal of Numerical Analysis and Approximation Theory* (Romanian Academy)

I am co-editor of volumes published by the American Mathematical Society (3 volumes), Birkhäuser (2 volumes), and the American Institute of Physics. I am the Guest Editor of Special Issues published by the *Journal of Mathematical Analysis and Applications, Nonlinear Analysis, Complex Variables and Elliptic Equations, Communications in Pure and Applied Analysis, Boundary Value Problems*

5. Main Fields of Research:

Explicit formula for the renormalized energy of the Ginzburg-Landau functional and study of the minimal configuration of vortices. This solves an open problem of H. Brezis, F. Bethuel and F. Hélein.

Asymptotic analysis of the minimizers of the Ginzburg-Landau energy with weight and formula for the corresponding renormalized energy. I have also considered the singular case of vanishing weights. This solves an open problem of H. Brezis, F. Bethuel and F. Hélein.

Study of bifurcation problems with nonlinearity having asymptotic linear growth. This solves an open problem of H. Brezis and L. Nirenberg. The initial conjecture raised by H. Brezis and L. Nirenberg is related to the Gelfand problem. In our case, there are distinguished two completely different situations and the study performed in both cases is exhaustive. The analysis has been extended to multiple nonlinear terms, in such a case being studied combined effects of these nonlinearities.

Introduction of the Karamata regular variation theory in the asymptotic analysis of singular solutions with boundary blow-up for the logistic equation. We introduced for the first time the Karamata regular variation theory in the asymptotic analysis of blow-up boundary solutions of logistic-type equations.

Improvement of the statements concerning blow-up boundary solutions for nonlinear elliptic equations. Usually it is assumed that the nonlinear term should satisfy a monotonicity assumption in combination with the Keller-Osserman condition. We have proved that the monotonicity assumption can be removed and that the crucial role is played by the growth rate of the nonlinear term.

Contributions to the study of combined effects for nonlinear singular elliptic equations. There are studied multiple types of perturbations for nonlinear elliptic PDEs with singular terms and it is extended the Karamata approach to problems of this type.

Study of new spectral phenomena for differential operators with one or more variable exponents. Problems with variable exponents have important applications in electrorheological (non-Newtonian) fluids, image processing, or robotics. There are established several striking properties, which are due to this new type of nonlinearities.

Extension in a nonsmooth setting of several classical results from critical point theory. We work both in the framework of Clarke's generalized gradient derivative or by using the notion of "weak slope" introduced by De Giorgi. There are extended several classical results, including the Ambrosetti-Rabinowitz, Pucci-Serrin, Ghoussoub-Preiss, and Ljusternik-Schnirelmann theorems. There are provided several applications to nonsmooth mechanics or multi-valued problems.

Contributions to the study of hemivariational, variational-hemivariational and quasi-hemivariational inequality problems. We have established several qualitative properties in the case of the perturbations with constraints and we have established various applications. One of these applications concerns the study of inequality problems with area-type term.

Effect of non-symmetric perturbations for problems with a symmetric structure. We prove that the number of solutions becomes larger and larger as the perturbation tends to zero with respect to a suitable topology. The method introduced in our works has been extended by other mathematicians to other classes of problems.

Variational analysis on fractal domains. Using the definition of the Laplace operator on self-similar fractals, we extend the classical variational analysis to these irregular domains.

Contributions to mathematical biology. We have developed mathematical tools in the study of Gierer-Meinhardt systems or Turing patterns in reaction-diffusion systems.

Refinement of Morse-type arguments for the qualitative analysis of solutions of Neumann and Robin problems.

Study of nonlinear problems described by nonlocal fractional operators.

6. Publications:

More than 300 research papers and 10 books. Some renowned journals where my papers have been published: *J. Math. Pures Appl. (Journal de Liouville)* (5 papers), *Transactions Amer. Math. Soc.* (2 papers), *J. Differential Equations* (5 papers), *Nonlinearity* (3 papers), *Proceedings Amer. Math. Soc.* (5 papers), *Proc. Royal Soc. London: Mathematical, Physical and Engineering Sciences* (one paper), *Comm. Partial Differential Equations* (one paper), *Ann. Inst. H. Poincaré-Analyse Non Linéaire* (one paper), *Annali della Scuola Normale Superiore di Pisa, Classe di Scienze* (one paper), *Journal d'Analyse Mathématique* (one paper), *Israel Journal of Mathematics* (3 papers), *Ann. Inst. Fourier-Grenoble* (one paper), *Calculus of Variations and Partial Differential Equations* (3 papers), *Proc. Royal Soc. Edinburgh* (5 papers), *Bull. London Math. Soc.* (one paper), *Comm. Contemp. Math.* (4 papers), *Ann. Mat. Pura Appl.* (one paper), *Math. Scand.* (2 papers), *Optimization* (one paper), *Optimization Letters* (2 papers), *J. Global Optimiz.* (5 papers), *Nonlinear Anal.: Real World Appl.* (5 papers), *Nonlinear Anal.: Theory, Methods & Appl.* (13 papers), *J. Math. Anal. Appl.* (9 papers), *Manuscripta Mathematica* (3 papers), *Ann. Acad. Sci. Fenn.* (4 papers), *Analysis and Applications* (5 papers), *ZAMP* (2 papers), *C. R. Acad. Sci. Paris* (22 papers).

7. Other Mathematical Activities:

I published 10 proposed problems in the *American Mathematical Monthly* and 2 problems in *SIAM Problems and Solutions*. I also published the *Opinion* "Agenda for a Mathematical Renaissance" in the *Notices of the American Mathematical Society*.

EXTENDED CURRICULUM VITAE

Last name: Rădulescu

First name: Vicențiu

Date and place of birth: 11 May 1958 at Caracal, Romania

Education:

- B. Sc., Master and Ph.D.: Faculty of Mathematics, University of Craiova, Romania
- Ph.D.: Laboratoire d'Analyse Numérique, Université Pierre et Marie Curie (Paris 6)
- Habilitation: Laboratoire Jacques-Louis Lions, Université Pierre et Marie Curie (Paris 6)

Present positions:

- Professorial Fellow at the Institute of Mathematics “Simion Stoilow” of the Romanian Academy, Bucharest, Romania
- Full Professor at the Department of Mathematics, University of Craiova, Romania
- Distinguished Adjunct Professor, King Abdulaziz University, Jeddah, Saudi Arabia (2014-2017)
- Honorary Director of the Institute of Applied Mathematics, Harbin, China (since 2014)
- Researcher in the *Topology, Geometry and Nonlinear Analysis Group* of the Institute for Mathematics, Physics and Mechanics, University of Ljubljana, Slovenia (since 2009)

Address: Department of Mathematics, University of Craiova, 200 585 Craiova, Romania, phone: (+40) 251.412615; fax: (+40) 251.411688

E-mail: vicentiu.radulescu@math.cnrs.fr vicentiu.radulescu@imar.ro

Web pages: <http://www.math.ucv.ro/~radulescu> <http://www.imar.ro/~vradules>

Degrees:

- December 1993: Ph. D. at the University of Craiova, Romania with the thesis *Applications of Operator Theory to Nonlinear Analysis*. Adviser: Prof. Constantin Niculescu.
- June 1995: Ph.D. at the Laboratoire d'Analyse Numérique, Université Pierre et Marie Curie from Paris under the coordination of Professor Haim Brezis, with the thesis *Analysis of Some Problems Related to the Ginzburg-Landau Equation*. The commission was composed by the following Professors: Haim Brezis, Fabrice Béthuel, Thierry Cazenave, Doina Cioranescu, Alain Haraux, Frédéric Hélein and L.A. Peletier. For this thesis I received the highest academic distinction: *très honorable avec félicitations*.
- February 2003: Habilitation “à diriger des recherches” at the Université Pierre et Marie Curie (Paris 6): *Analyse de quelques problèmes aux limites elliptiques non linéaires*. Mémoire realized under the coordination of Professor Haim Brezis (member of the French Academy - Institut de France). The reports have been written by Prof. Catherine Bandle, Prof. Otared Kavian and Prof. Michel Willem. The other members of the commission were Prof. Fabrice Bethuel, Prof. Doina Cioranescu and Prof. Laurent Véron.

Scientific and honorary awards:

- Simion Stoilow Prize of the Romanian Academy, 1999
- Prize for Excellence in Research of the Romanian Research Council, 2007
- Distinguished Foreign Professor, University of Ljubljana (July–September 2008)
- Best Associate Editor of the *Journal of Mathematical Analysis and Applications*, 2009
- Award of the Editors-in-Chief of the *Journal of Mathematical Analysis and Applications* for the activity as Associate Editor, 2013
- Member of the *Accademia Peloritana dei Pericolanti*, Messina (since January 2014)

- Highly Cited Researcher 2014
- Honorary Director, Institute of Mathematics of the Heilongjiang Institute of Technology, Harbin, China (since 2014)
- Senior Research Fellow, City University of Hong Kong, 2015
- Member of the *Accademia delle Scienze dell'Umbria*, Perugia (since 2017)

Academic experience:

- 1977–1982: Faculty of Mathematics, University of Craiova, Romania
- 1982–1990: High-school Mathematics teacher
- 1990–1992: Assistant, Department of Mathematics, University of Craiova, Romania
- 1992–1995: Lecturer, University of Craiova, Romania
- 1995–1998: Associate Professor, University of Craiova, Romania
- 1998 to Present : Full Professor, Department of Mathematics, University of Craiova, Romania
- 2007 to Present : Professorial Fellow, Institute of Mathematics “Simion Stoilow” of the Romanian Academy, Bucharest, Romania
- 2008-2015 : Associate Professor at the University A.I. Cuza of Iași
- 2008 to Present : Member of the Scientific Board of the *Laboratoire Européen Associé CNRS Franco–Roumain Mathématiques & Modélisation* between the *Laboratoire de Mathématiques de l'Université Paris-Sud (Orsay)* and the “Simion Stoilow” Mathematics Institute of the Romanian Academy
- 2011-2015 : Member of the National Council for Titles, Diplomas and Certificates (Mathematics and Natural Sciences Commission)
- 2014-2017 : Distinguished Adjunct Professor, King Abdulaziz University, Jeddah, Saudi Arabia
- 2014 to Present : Honorary Director of the Institute of Applied Mathematics, Harbin, China

Editorial activities:

- Member of the Editorial Board of the new Academic Press *Mathematics in Science and Engineering* Book Series (Elsevier)
- Acquisition Editor, *De Gruyter Open Book Publishing Program in Mathematics*
- Editor-in-Chief of *Advances in Nonlinear Analysis* (Walter de Gruyter)
- Editor-in-Chief of *Boundary Value Problems* (Springer, 2011 ISI Impact Factor: 1.068)
- Associate Editor of *Nonlinear Analysis: Theory, Methods & Applications* (Elsevier, 2011 ISI Impact Factor: 1.536)
- Associate Editor of the *Journal of Mathematical Analysis and Applications* (Elsevier, 2011 ISI Impact Factor: 1.001)
- Advisory Editor of *Mathematical Methods in the Applied Sciences* (Wiley)
- Member of the Editorial Board of *Complex Variables and Elliptic Equations* (Taylor & Francis, 2011 ISI Impact Factor: 0.532)
- Associate Editor of the *Electronic Journal of Differential Equations* (2011 ISI Impact Factor: 0.427)
- Editor of *Advances in Pure and Applied Mathematics* (Walter de Gruyter)
- Associate Editor of *Discrete and Continuous Dynamical Systems, Series S* (American Institute of Mathematical Sciences)
- Member of the Editorial Committee of *Opuscula Mathematica* (Krakow University)
- Member of the Editorial Board of the *Journal of Mathematics and Applications* (Rzeszow University of Technology)
- Member of the Editorial Board of “MATHlics Research Paper Series Applied MATHematics Journal for EconomICS” (edited by MEDALics–Research Centre on Mediterranean Relations)

- Member of the Editorial Board of *Journal of Numerical Analysis and Approximation Theory* (Romanian Academy)
- Member of the Editorial Board of *Ann. St. Univ. Ovidius Constanta*
- Member of the Editorial Advisory Board of the *Journal of Advanced Mathematical Studies*
- Editor in Chief of the *Annals of the University of Craiova - Mathematics and Computer Science Series*
- Member of the Editorial Board of *Publications of the Centre for Nonlinear Analysis and its Applications*
- Associate Editor of *Arhimede*
- Associate Editor of the *Bulletin of Mathematical Analysis and Applications* (2008–2011)
- Honorary Editor of the *International Journal of Mathematical Analysis* (2011-2015)

Fields of interest:

- nonlinear partial differential equations of elliptic type
- degenerate and singular phenomena in mathematical physics (logistic equations with blow-up boundary, nonlinear PDEs with singular terms, PDEs on fractal domains)
- topological and variational methods with applications to nonlinear partial differential equations and unilateral problems
- bifurcation theory and applications to mathematical physics, chemistry, and mathematical biology
- spectral analysis for non-homogeneous differential operators and applications to electrorheological fluids

Courses:

- *Functional Analysis* (10 hours, Central European University, Budapest, September 2002)
- *Nonlinear Analysis and Mathematical Physics* (52 hours, École Normale Supérieure, Bucharest, Academic year 2005-2006)
- *Applied Functional Analysis and Partial Differential Equations* (48 hours, École Normale Supérieure, Bucharest, Academic year 2010-2011)
- *Comparison Principles and Critical Point Methods in Nonlinear Analysis*, Mini-courses in Mathematical Analysis, University of Padova, June 18-22, 2012
- *Singular Phenomena in Nonlinear Elliptic Equations*, Mini-courses in Partial Differential Equations, Women in Mathematics Summer School, ICTP, Trieste, May 27–June 1, 2013
- *Nonlinear Analysis* (60 hours), AGH University of Science and Technology, Krakow, November 2017

Between 2002 and 2014 I organized the *Ateliers d'Écriture Scientifique* at the Doctoral School of the Université de Picardie “Jules Verne”, Amiens.

Visiting Professor Positions:

- University of Uppsala (two weeks in October 1995)
- Politecnico di Milano (March 1996, with a CNR research grant)
- Freie Universität in Berlin (two weeks in May 1996)
- Aristotle University in Thessaloniki (June 1996)
- Leiden University (October and November 1996)
- Università Cattolica di Brescia (March 1997, with a CNR research grant)
- Aristotle University in Thessaloniki (May 15 - June 15, 1997)
- Universities of Sussex and Oxford (December 15, 1997 - February 15, 1998), with a Royal Society Research Fellowship

- 1998-2000: PAST Visiting Professor at the Laboratoire d'Analyse Numérique, Université Pierre et Marie Curie (Paris 6)
- Université Catholique de Louvain (Belgium) in November 1998
- University of Perugia (Nov. 15 - Dec. 15, 1999, with a CNR research grant)
- Université Pierre et Marie Curie (March 1 - May 31, 2001) with a CNRS research visiting position at the Laboratoire d'Analyse Numérique
- Université Catholique de Louvain (Belgium) in October 2001
- Université de Picardie "Jules Verne", Amiens (February 2002)
- Politecnico di Milano (June–July 2002, with a GNAMPA–INdAM Visiting Professor position)
- Université de Savoie–Chambéry (September 1 - November 30, 2002) with a CNRS research visiting position
- Central-European University, Budapest (10 days in September 2002)
- Université de Picardie "Jules Verne", Amiens (February 2003)
- Université de Tunis El Manar (two weeks in April 2003)
- Institut Elie Cartan, Université Henri Poincaré (Nancy I) (May 2003)
- Mathematisches Institut, Basel Universität (two weeks in June 2003)
- Université de Perpignan (July 2003)
- Université de Picardie "Jules Verne", Amiens (February 2004)
- Université de Savoie–Chambéry (two weeks in March 2004)
- Université de Tunis El Manar (two weeks in April 2004)
- Université Catholique de Louvain (Belgium) in November 2004
- Université de Picardie "Jules Verne", Amiens (February 2005)
- Universidad Complutense de Madrid (one week in March 2005)
- City University of Hong Kong (two weeks in April 2005)
- Université de Tunis El Manar (two weeks in May 2005)
- Université de Franche Comté and Université de Limoges (two weeks in November 2005)
- Université de Picardie "Jules Verne", Amiens (February 2006)
- Université de Tunis El Manar (one week in May 2006)
- Université de Poitiers (June 2006)
- Université de Savoie (two weeks in August 2006)
- Central European University in Budapest (one week in September 2006)
- Université de Picardie "Jules Verne", Amiens (one week in October 2006)
- University of Perugia (November 2006, with a GNAMPA–INdAM Visiting Professor position)
- Université de Picardie "Jules Verne", Amiens (February 2007)
- Université de Tunis El Manar (one week in March 2007)
- Université de Haute Alsace (May 2007)
- Université de La Rochelle (one week in July 2007)
- Approximation and Wavelets, Bilateral Workshop Romania-Germany, October 1-4, 2007, Königswinter, Germany
- Université Catholique de Louvain (December 2007)
- Université de Picardie "Jules Verne", Amiens (February 2008)
- Université de Tunis El Manar (two weeks in March 2008)
- Université de Limoges (May 2008)
- Université de Tours (June 2008)
- University of Perugia (two weeks in July 2008) with a GNAMPA–INdAM Visiting Professor position

- Visiting Professor, Institute of Mathematics, Physics and Mechanics, University of Ljubljana (July–September 2008)
- University of Cagliari (two weeks in October 2008)
- Scuola Normale Superiore di Pisa (one week in October 2008)
- City University of Hong Kong (one week in December 2008)
- Université de Picardie “Jules Verne”, Amiens (February 2009)
- Université de Tunis El Manar (one week in April 2009)
- University of Rzeszów (one week in May 2009)
- University of Ljubljana (one week in May 2009)
- Université Pierre et Marie Curie Paris VI (one week in August 2009)
- Université de La Rochelle (one week in September 2009)
- Université de Picardie “Jules Verne”, Amiens (February 2010)
- University of Rousse, Bulgaria (one week in April 2010)
- University of Messina, Italy (one week in April 2010)
- Universidad Autónoma de Madrid (one week in June 2010)
- University of Oulu, Finland (one week in June 2010)
- Institut Henri Poincaré, Paris (one week in November 2010)
- Université de Tunis El Manar (one week in January 2011)
- Université de Picardie “Jules Verne”, Amiens (May 2011)
- University of Oxford (one week in November 2011)
- University of Monastir (one week in March 2012)
- Université de Poitiers (one week in March 2012)
- Jagiellonian and AGH University of Science and Technology of Krakow (one week in May 2012)
- University of Perugia (15 May–15 June 2012) with a GNAMPA–INdAM Visiting Professor position
- Université de Picardie “Jules Verne”, Amiens (November 2012)
- Universities of Catania and Reggio Calabria (two weeks in January 2013)
- Université de Besançon (March 2013)
- Université de Poitiers (April 2013)
- Université de Tanger, Maroc (two weeks in May 2013)
- ICTP Trieste (one week in May 2013)
- King Abdulaziz University, Jeddah, Saudi Arabia (one week in September 2013)
- Universities of Reggio Calabria and Messina (one week in October 2013)
- Université de Picardie “Jules Verne”, Amiens (November 2013)
- Isaac Newton Institute, Cambridge, Programme *Free Boundary Problems and Related Topics* (G.-Q. Chen, H. Shahgholian, J.-L. Vázquez, organizers), 6 January–4 July, 2014
- University of Ljubljana (one week in January 2014)
- Université Cadi Ayyad, Marrakech (one week in March 2014)
- King Abdulaziz University, Jeddah, Saudi Arabia (two weeks in April 2014)
- University of Pisa (one week in May 2014)
- Recent Trends in Nonlinear Partial Differential Equations and Applications Celebrating Enzo Mitidieri’s 60th Birthday, University of Trieste, 28–30 May 2014
- Universidad Autónoma de Madrid (one week in July 2014)
- Université de Picardie “Jules Verne”, Amiens (November 2014)
- King Abdulaziz University, Jeddah, Saudi Arabia (two weeks in December 2014)
- University of Perugia (one week in January 2015)
- Senior Research Fellow, City University of Hong Kong (February 2015)

- King Abdulaziz University, Jeddah, Saudi Arabia (two weeks in April 2015)
- King Saud University, Riyadh, Saudi Arabia (one week in May 2015)
- Isaac Newton Institute, Cambridge, Programme *Coupling Geometric PDEs with Physics for Cell Morphology, Motility and Pattern Formation* (R. Leube, A. Madzvamuse, R. Merkel, H. Othmer, organizers), 13 July–18 December, 2015
- Université de Pau (two weeks in October 2015)
- King Saud University, Riyadh, Saudi Arabia (one week in November 2015)
- King Abdulaziz University, Jeddah, Saudi Arabia (two weeks in December 2015)
- University of Stockholm (one week in January 2016)
- Université de Tunis (one week in March 2016)
- King Abdulaziz University, Jeddah, Saudi Arabia (two weeks in April 2016)
- University of Perugia (one week in September 2016)
- King Saud University, Riyadh, Saudi Arabia (one week in October 2016)
- Université de Picardie “Jules Verne”, Amiens (November 2016)
- King Abdulaziz University, Jeddah, Saudi Arabia (two weeks in December 2016)
- University of Perugia (one week in January 2017)
- AGH University of Science and Technology, Krakow (November 2017)
- University of Perugia (one week in January 2018)
- University of Stockholm (one week in February 2018)
- King Saud University, Riyadh, Saudi Arabia (one week in April 2018)

Lectures delivered abroad:

- University of Wisconsin, Madison, USA (June 1991), on the occasion of the Conference *Mary Ellen Rudin and Her Work*
- Hyères, France (May 1993) at the 25ème Congrès National d’Analyse Numérique
- Almeria, Spain (June 1993) at the Summer School organized by Universidad Complutense from Madrid
- Université Pierre et Marie Curie (Paris 6), Laboratoire d’Analyse Numérique (1994 and 1995)
- ENS Paris (May 1994), at the 2nd French-Romanian Colloquium
- University of Uppsala (October 1995)
- Universities of Brescia, Trento, Padova, Milano, Politecnico di Torino and Politecnico di Milano (March 1996)
- Freie Universität from Berlin (two talks in May 1996)
- Plenary lecture at the 3rd French-Romanian Colloquium (September 1996)
- Universities of Leiden (5 talks), Delft, Louvain-la-Neuve, Namur, Aachen (2 talks) and Rouen (October–November 1997)
- Universities of Brescia, Povo-Trento, Milano, Roma - Tor Vergata and Politecnico di Milano (March 1997)
- University of Delaware (June 3-7, 1997): ISAAC’97, the First International Congress of the International Society for Analysis, its Applications and Computation, with the paper “Perturbation techniques for hemivariational eigenvalue problems”
- University of Sussex at Brighton (February 1998)
- Université de Limoges (May 1998, June 1999, May 2000 and November 2002)
- Universités Catholique de Louvain-la-Neuve and Libre de Bruxelles (November 1998, April 2000, October 2001)
- Universités de Montpellier (April 1999) et de Nancy (June 1999, May 2001, May 2003)

- Universities of Rome Tor-Vergata, Politecnico Milano, Brescia, Trento-Povo and Perugia (Nov.-Dec. 1999)
- Plenary lecture at the 5th French-Romanian Colloquium (August 2000)
- Romanian Academy of Sciences (February 2001)
- Université de Savoie-Chambéry (April 2001, October 2002, February 2006)
- Université de Paris 6 (Analyse Numérique and Théorie du Potentiel, May 2001)
- Université de Picardie-Amiens (May 2001, three talks in February 2002, two talks in February 2003, three talks in February 2004, November 2004, February 2005, February 2006)
- Université de Strasbourg (May 2001)
- CIMPA-UNESCO-CEU School on Functional Analysis, Partial Differential Equations and Numerical Analysis, Budapest, Central-European University, September 2002 [10 courses (=20h) on Functional Analysis]
- Université de Tunis El Manar (April 2003, April 2004, May 2005, May 2006)
- Mathematisches Institut, Universität Basel (June 2003)
- Université de Perpignan (July 2003)
- 21st IFIP TC 7 Conference on System Modelling and Optimization, Sophia Antipolis, France, July 21-25, 2003. Organized by the International Federation for Information Processing.
- Fifth European Conference on Elliptic and Parabolic Problems: A Special Tribute to the Work of Haim Brezis, Gaeta, May 30 - June 3, 2004
- Fourth European Congress of Mathematics, Stockholm, June 27 - July 2, 2004
- Université Catholique de Louvain (two talks in November 2004)
- Universidad Complutense de Madrid (March 2005)
- City University of Hong Kong (April 2005)
- Université de Franche Comté (November 2005)
- Université d'Orléans (February 2006)
- Institute of Mathematics "Simion Stoilow" of the Romanian Academy (March 2006)
- Université de La Rochelle (June 2006)
- Journée sur les équations aux dérivées partielles non linéaires, Université de La Rochelle (June 2006)
- 6th International Conference on Dynamical Systems and Differential Equations (American Institute of Mathematical Sciences), Poitiers, June 2006
- Conférence Francophone sur la Modélisation Mathématique en Biologie et en Médecine, Craiova, July 12-14, 2006
- Plenary lecture at the 8th French-Romanian Colloquium, Chambéry, August 2006
- International Conference on Applied Analysis and Differential Equations, Iasi, September 4-9, 2006
- Central European University, Budapest, September 2006
- Workshop on Potential Analysis, Institute of Mathematics "Simion Stoilow" of the Romanian Academy, Bucharest (October 2006)
- Politecnico di Milano and Universities of Perugia (3 talks), La Sapienza (Rome 1), Tor Vergata (Rome 2), Naples, Milano, Florence, Pise and Bologna (November 2006)
- Plenary lecture at the 15th Colloque de la Société Mathématique de Tunisie (Sousse, 19-22 March 2007)
- Plenary lecture at the International Conference on Nonlinear Operators, Differential Equations and Applications, Cluj, July 4-8, 2007
- Summer School "Critical Point Theory and Applications", Cluj, July 9-13, 2007

- International Conference on Theory and Applications in Mathematics and Informatics, Alba Iulia, August 30 - September 2, 2007
- Bilateral Workshop Romania-Germany Approximation and Wavelets, Königswinter, Germany, October 1-4, 2007
- 9th Conference on Mathematical Analysis and Applications, Iasi, October 26-27, 2007
- Second Workshop Series on Applied Mathematics, Pitești, November 2-4, 2007
- Second Romanian-German Round Table for Research, Bucharest, November 8-9, 2007
- The Future of Mathematical Education in Europe, Lisbon, December 17-18, 2007
- Plenary lecture at the International Conference *Liouville Theorems and Detours*, INdAM Conference, Cortona, May 18-25, 2008
- University of Ljubljana (July and August 2008)
- Scuola Normale Superiore di Pisa (October 2008)
- University Ovidius of Constanta (November 2008)
- Plenary lecture at the *International Conference on Partial Differential Equations and Applications - in Honor of Professor Philippe G. Ciarlet's 70th Birthday*, City University, Hong Kong, December 5-8, 2008
- Université de Picardie Jules Verne (February 2009)
- University of Rzeszów (two talks in May 2009)
- Państwowa Wyższa Szkoła Zawodowa, Jaroslaw, Poland (May 2009)
- Romania-Germany Workshop Nonlinear Analysis and Mathematical Physics, University Lucian Blaga of Sibiu, May 14-16, 2009
- Premier Séminaire Roumain-Tunisien en Mathématiques (4th Workshop Series on Mathematics), IMAR Bucharest, November 2009
- University Ovidius of Constanta (May 2009)
- Université de Picardie Jules Verne (February 2010)
- International Workshop *Nonlinear Difference and Differential Equations and their Applications*, University of Rousse, Bulgaria (April 2010)
- International Workshop *Variational, Topological and Set-Valued Methods For Nonlinear Differential Problems*, University of Messina, Italy (April 2010)
- Workshop on Asymptotic Analysis and Stochastic Methods for Heterogeneous Media, Alba Iulia (June 9-13, 2010)
- International Conference *Variable Exponent Analysis*, Oulu, Finland, June 29-July 2, 2010 (two conferences on *Eigenvalue Problems Associated to Nonhomogeneous Differential Operators in Spaces with Variable Exponent*)
- XIVth Conference of the Romanian Mathematical Society, Alba Iulia (October 15-17, 2010)
- Institute of Mathematics "Simion Stoilow" of the Romanian Academy (October 2010)
- International Conference on Nonlinear Operators, Differential Equations and Applications (ICN-ODEA 2011), Cluj, July 5-8, 2011
- Partial Differential Equations in Mathematical Physics and their Numerical Approximation, Levico Terme, Trento, Italy, September 4-9, 2011
- University Ovidius of Constanta (October 2011)
- Oxford PDE Seminar, University of Oxford (November 2011)
- Université de Poitiers (March 2012)
- Université de Monastir (March 2012)
- 18e Colloque de la Société Mathématique de Tunisie, Mahdia, 19-22 March 2012
- Jagiellonian University of Krakow (two talks in May 2012)

- AGH University of Science and Technology of Krakow (two talks in May 2012)
- Mini-symposium *Variational Methods and Nonlinear PDEs*, 7th European Conference on Elliptic and Parabolic Problems, Gaeta, May 20–25, 2012
- Plenary lecture at the International Conference in Honor of Professor Patrizia Pucci’s 60th birthday, University of Perugia, May 28–June 1, 2012
- Mini-courses in Mathematical Analysis, University of Padova, June 18-22, 2012
- 10th International Conference on Fixed Point Theory and its Applications, Cluj, July 9-15, 2012
- International Winter School on Mathematical Fluid Dynamics, Levico Terme, Trento, Italy, December 16-21, 2012
- University of Catania (January 2013)
- Workshop “Meeting on Mathematics”, University of Reggio Calabria (January 2013)
- Université de Besançon (March 2013)
- International Workshop “New Trends in Pure and Applied Nonlinear Analysis”, Sibiu, April 2013
- Université de Poitiers (April 2013)
- Workshop et École de Recherche CIMPA *EDP Non Linéaires et Applications: Étude Théorique et Numérique*, Université de Tanger, Maroc, 5-17 Mai 2013
- Mini-courses in Nonlinear Partial Differential Equations, Women in Mathematics, Mathematics of Planet Earth, Summer School ICTP Trieste, May 27 – June 1, 2013
- International Workshop on Variational Problems and PDE’s, September 2–6, 2013, Sao Paulo, Brazil
- King Abdulaziz University, Jeddah, Saudi Arabia (September 2013)
- Seminars on Nonlinear Analysis, Reggio Calabria (October 22, 2013)
- International School on Computational Commutative Algebra and Algebraic Geometry, Messina (October 23-26, 2013)
- Programme *Free Boundary Problems and Related Topics* (G.-Q. Chen, H. Shahgholian, J.-L. Vázquez, organizers), Isaac Newton Institute, Cambridge, 6 January–4 July, 2014
- University of East Anglia (January 2014)
- Institute Isaac Newton, University of Cambridge (January 2014)
- University of Swansea (January 2014)
- University of Cardiff (January 2014)
- University of Nottingham (January 2014)
- Plenary lecture at the International Conference “Recent Advances in PDEs and Applications (on occasion of Professor Hugo Beirao da Veiga’s 70th birthday)”, Levico Terme, Trento, Italy, February 17-21, 2014
- Université Cadi Ayyad, Marrakech (March 2014)
- King Abdulaziz University, Jeddah, Saudi Arabia (April 2014)
- University of Pisa (May 2014)
- Mini-symposium *Recent Trends in Nonlinear Analysis and its Applications*, 8th European Conference on Elliptic and Parabolic Problems, Gaeta, May 26–30, 2014
- Plenary lecture at the International Conference “Recent Trends in Nonlinear Partial Differential Equations and Applications Celebrating Enzo Mitidieri’s 60th Birthday”, University of Trieste, 28–30 May 2014
- International Workshop on Nonlinear Analysis and Applications to Economics dedicated to Professor Dušan Repovš on his 60th birthday, University of Craiova, 25 September 2014
- Invited speaker at the conference *Recent Trends on Nonlinear Phenomena*, Reggio Calabria, 5-7 November 2014

- University of Perugia (January 2015)
- Talks at the School and the Conference on Partial Differential Equations, München, 25-29 March 2015
- King Abdulaziz University, Jeddah, Saudi Arabia (April 2015)
- King Saud University, Riyadh, Saudi Arabia (May 2015)
- Recent Advances in Dynamics of Variational Inequalities and Equilibrium Problems, EuroXXVII Annual Conference, Glasgow, 12-15 July 2015
- International Conference on Nonlinear Operators, Differential Equations and Applications, Cluj, 14-17 July 2015
- International Workshop “Variational Analysis and Applications”, Erice, 28 August–5 September 2015
- Université de Pau (October 2015)
- Séminaires “Analyse-E.D.P.”, Université Toulouse 1 (October 2015)
- Equilibrium and Optimization Methodology in Finance and Economics, King Saud University, Riyadh, Saudi Arabia, 9-11 November 2015
- University of Stockholm (January 2016)
- Journée d’Équations aux Dérivées Partielles, Kairouan, Tunisia (18 March 2016)
- Plenary lecture at the 21st Colloque de la Société Mathématique de Tunisie (Sousse, 21-24 March 2016)
- Invited speaker at the “International Conference on Applied Mathematics and Numerical Methods”, Craiova (14-16 April 2016)
- Invited speaker at the “Third Conference on Recent Trends in Nonlinear Phenomena”, University of Perugia (28-30 September 2016)
- Plenary speaker at the international workshop “James Serrin: from his legacy to the new frontiers”, University of Perugia (30 January–3 February 2017)
- Plenary speaker at the “Fourth Conference on Recent Trends in Nonlinear Phenomena”, University of Messina (18-20 September 2017)
- Faculty of Applied Mathematics, AGH University of Science and Technology, Krakow (8 November 2017)
- Faculty of Mathematics and Applied Physics, Rzeszow University of Technology, Rzeszow (17 November 2017)
- Chair of Optimization and Control, Jagiellonian University, Krakow (23 November 2017)
- *Accademia delle Scienze dell’Umbria*, January 2018
- Plenary speaker at the international conference “Two Nonlinear Days in Perugia on the occasion of Patrizia Pucci’s 65th birthday”, University of Perugia (11-12 January 2018)
- University of Stockholm (February 2018)
- Keynote speaker at Fourth Conference on Mathematical Sciences and Applications, King Saud University, Riyadh, 11-12 April 2018

Organizer of International Conferences:

- 7ème Colloque Franco–Roumain de Mathématiques Appliquées, Craiova (Romania), 30 août–3 septembre 2004
- 8th International Conference of Mathematical Analysis and Applications, Craiova, September 23–24, 2005
- Conférence Francophone sur la Modélisation Mathématique en Biologie et en Médecine, Craiova (Romania), 12–14 juillet 2006

- 6th Congress of Romanian Mathematicians, Bucharest, June 28–July 4, 2007
- Bilateral Workshop Romania–Germany Approximation and Wavelets, Königswinter, Germany, October 1–4, 2007
- Current and Prospective Trends in Mathematical Research, Institute of Mathematics Simion Stoilow of the Romanian Academy, Bucharest, September 17–18, 2008
- International Conference on Partial Differential Equations and Applications - in Honor of Professor Philippe G. Ciarlet’s 70th Birthday, City University, Hong Kong, December 5–8, 2008
- Romania-Germany Workshop Nonlinear Analysis and Mathematical Physics, University Lucian Blaga of Sibiu, May 14–16, 2009
- 7th Congress of Romanian Mathematicians, Brasov, June 29–July 5, 2011
- New Trends in Modern Analysis: Probabilistic and Analytic Methods in PDEs and Spectral Theory, Hammamet (Tunisia), October 24–28, 2011
- Lectures on Partial Differential Equations, International Conference in Honor of Professor Patrizia Pucci’s 60th birthday, University of Perugia, May 28–June 1, 2012
- Special Session “Analyse et Analyse des Équations aux Dérivées Partielles” (with L. Rifford), XIème Colloque Franco-Roumain de Mathématiques Appliquées, Bucharest, August 24–30, 2012
- Workshop “New Trends in Pure and Applied Nonlinear Analysis”, Sibiu, March 2013
- International Conference “Recent Advances in PDEs and Applications” (on occasion of Professor Hugo Beirao da Veiga’s 70th birthday), Levico Terme (Trento), Italy, February 17–21, 2014
- International Congress in Nonlinear Analysis, Uludag University, Bursa, Turkey, June 23–26, 2014
- Special Session “Discrete and Continuous Boundary Value Problems and Applications”, 10th AIMS Conference in Dynamical Systems, Differential Equations and Applications, Madrid, July 7–11, 2014
- International Workshop on Nonlinear Analysis and Applications to Economics dedicated to Professor Dučan Repovš on his 60th birthday, University of Craiova, 25 September 2014
- Section “Ordinary and Partial Differential Equations, Variational Methods”, 8th Congress of Romanian Mathematicians, Iasi, June 26–July 1, 2015
- Equilibrium and Optimization Methodology in Finance and Economics, King Saud University, Riyadh, Saudi Arabia, 9–11 November 2015

Director of research grants

1. *Grants funded in Romania*

1998: *Aplicatii ale ecuatiilor fizicii matematice in mecanica newtoniana si fizica energiilor inalte*. Grant CNCSIS (CNCSIS 9/1998/A/1)

1999–2001: *Sisteme guvernate de ecuatiile fizicii matematice, sisteme expert si aplicatii in fizica*. Grant CNCSIS (CNCSIS 79/1999/A/1, 1/2000/A/1, 340/2001/A/1)

2003–2004: *Analiza unor clase de probleme la limita singulare in medii anizotrope: existenta, unicitatea si comportamentul asymptotic al solutiilor*. Grant with the Romanian Academy (GAR 12/2004).

2004–2006: *Nelinearitati si singularitati in fizica matematica*. Grant CNCSIS (CNCSIS 308/2006).

2005–2006: *Probleme singulare de tip Lane-Emden-Fowler cu convectie*. Grant with the Romanian Academy (GAR 80/2006).

2007–2008: *Analiza si controlul sistemelor diferentiale neliniare*. Grant CNCSIS (CNCSIS 589/2008)

2007–2008: *Probleme degenerate si singulare in analiza neliniara*. Grant with the Romanian Academy (GAR 315/2007)

2007–2010: *Procese neliniare degenerate si singulare*. Grant CNCSIS Idei (CNCSIS ID-79/2007)

2009: Workshop “Nonlinear Analysis and Mathematical Physics”, Sibiu, 14-16 May 2009. Organized with CNCSIS financment within the Program PNII–Exploratory Workshops

2010-2013: *Sisteme diferentiale in analiza neliniara si aplicatii*. Grant CNCS, the only grant in Mathematics approved in the competition “Proiecte Complexe de Cercetare Exploratorie” (CNCS PCCE-8/2010)

2011-2016: *Qualitative and numerical analysis of nonlinear problems on fractals*. Grant CNCS Idei approved in the competition “Proiecte de Cercetare Exploratorie” (CNCS PCE-47/2011)

2013: International Workshop “New Trends in Pure and Applied Nonlinear Analysis”, Sibiu, March 2013. Organized with CNCS financment within the Program PNII–Exploratory Workshops

2014-2017: *Sisteme de asigurare a securitatii informatiei bazate pe modele neliniare de analiza a fluxului informational*. Grant CNCS “Proiecte Complexe de Cercetare Avansata” (CNCS PN-II-PT-PCCA-2013-4-0614)

2017-2020: *Analiza calitativa si numerica a unor clase de sisteme diferentiale anizotrope si aplicatii*. Grant CNCS-UEFISCDI approved in the competition “Proiecte de Cercetare Exploratorie” (PN-III-P4-ID-PCE-2016-0130)

2. International grants

2003-2004: *Analiza neliniara si aplicatii in mecanica solidelor*, Vicențiu Rădulescu and Mircea Sofonea (co-directors). Program EGIDE-Brancusi between University of Craiova and University of Perpignan, France

2005-2007: *Ecuatii cu derivate partiale si aplicatii*, Vicențiu Rădulescu and Olivier Goubet (co-directors). Program EGIDE-Brancusi (PAI 08915PG) between University of Craiova and Université de Picardie Jules Verne, Amiens, France

2014: *Qualitative Analysis of Some Degenerate and Singular Phenomena in Nonlinear Analysis*, HiCi Program No. 39-130-35-HiCi, King Abdulaziz University, Jeddah, Saudi Arabia

2017: *Limiting sets of iterative systems in dimensions 3 and 4*, grant BI-US/17-18-002 between Slovenia and United States (University of Ljubljana and Oregon State University)

2017: *Analiza zveznih in diskretnih matematičnih modelov v biologiji, kemiji in genetiki (Analysis of continuous and discrete mathematical models in biology, chemistry and genetics)*, grant N1-0064 between Slovenia (Institute of Mathematics, Physics and Mechanics, Ljubljana) and Hungary (Eötvös Loránd, Budapest), 91.553 EUR

I have been member in the following Romanian or international research grants:

(i) Project P.I.C.S. between France and Romania (1999-2003), directors: H. Brezis and M. Iosifescu

(ii) Project P.I.C.S. between France and Romania (2005-2009), directors: D. Cioranescu and M. Iosifescu

(iii) European Project *Smart Systems: New Materials, Adaptive Systems and Their Nonlinearities. Modelling, Control and Numerical Simulation*, director: B. Miara

(iv) Grant CNCSIS D4-2001 *Sisteme dinamice si probleme de evolutie* (contract MEN26044/2001 funded by the World Bank), director: C. Niculescu

(v) Grant CNCSIS 341/2001 *Teoria sistemelor hamiltoniene si aplicatii in fizica particulelor elementare*, director: R. Constantinescu

(vi) Grant CNCSIS 132/1995 *Metode algebrice, topologice, variationale si de ordine in studiul analizei neliniare si al analizei functionale*, director: C. Niculescu

(vii) Grant CNCSIS 447/1996 *Aplicatii ale metodelor topologice si variationale in studiul problemelor fizicii matematice*, director: C. Niculescu

- (viii) Grant CNCSIS 195/1997 *Metode topologice si variationale in studiul problemelor de evolutie*, director: C. Niculescu
- (ix) Grant CNCSIS 10/1998 *Aplicatii ale metodelor topologice, variationale si statistice in studiul problemelor de evolutie*, director: C. Niculescu
- (x) Grant CNCSIS 303/1999 *Aplicatii ale metodelor topologice, variationale si ergodice in studiul problemelor de evolutie*, director: C. Niculescu
- (xi) Grant CNCSIS 143/2001 *Noi inegalitati analitice si algebrice si aplicatii*, director: C. Niculescu
- (xii) Grant CEx05-D11-36 *Analiza si controlul sistemelor diferentiale*, director: V. Barbu
- (xiii) Grant 2-CEx06-11-18/2006 *Metode diferentiale deterministe si stocastice in studiul unor modele de evolutie*, director: R. Purice
- (xiv) Grant J1-9643 (2007-2010, funded by the Slovenian Research Agency) *New methods in geometry and topology and their applications*, director: D. Repovš (Univ. Ljubljana)
- (xv) Grant J1-2057 (2009-2012, funded by the Slovenian Research Agency) *Nestandardne vložitve Cantorjeve množice v Evklidski 3-prostor*, director: D. Repovš (Univ. Ljubljana)
- (xvi) Grant P1-0292 (2009-2014, funded by the Slovenian Research Agency) *Topology and geometry*, director: D. Repovš (Univ. Ljubljana)
- (xvii) Grant J1-4144 (2011-2014, funded by the Slovenian Research Agency) *Geometry and topology of 3-manifolds*, director: D. Repovš (Univ. Ljubljana)
- (xviii) Grant J1-6721 (2014-2017, funded by the Slovenian Research Agency) *Limiting sets of iterative systems in dimensions 3 and 4*, director: D. Repovš (Univ. Ljubljana)
- (xix) Grant J1-7025 (2016-2018, funded by the Slovenian Research Agency) *Izbrani problemi nelinearne analize*, director: D. Repovš (Univ. Ljubljana)

ResearcherID: <http://www.researcherid.com/rid/A-1503-2012>

Google Scholar: <http://scholar.google.com/citations?user=bQqf4NQAAAAJ&hl=fr&oi=ao>

Citations: my papers have been cited 4085 times by 1319 authors (until 1st of February June 2018, according to *MathSciNet*). My Hirsch Index is 35 (*MathScinet*) and 44 (*Google Scholar*). My G-index is 44 and my i10-index is 73.

Miscellanea. I am reviewer for *Mathematical Reviews* (since 1993), *Zentralblatt für Mathematik* (since 1995), *Applied Mechanics Review* (since 1999), and *MAA Reviews* (since 2007). I am also member of the American Mathematical Society (since 1995), the European Mathematical Society (since 2001), the Société de Mathématiques Appliquées et Industrielles (SMAI) de France (since 2002) and of ISAAC - the International Society for Analysis, its Applications and Computation (since 1997). I am an Expert Reviewer of the National Commission for Scientific and Technological Research of the Government of Chile (since 2013). I am the organizer of the Nonlinear Analysis Seminar at the Institute of Mathematics “Simion Stoilow” of the Romanian Academy.

SCIENTIFIC WORKS

THESES

1. *Applications de la théorie des opérateurs à l'analyse non linéaire*, Ph.D. thesis, University of Craiova, 17 December 1993.
2. *Analyse de quelques problèmes liés à l'équation de Ginzburg-Landau*, Ph.D. thesis, Université Pierre et Marie Curie (Paris VI), 29 June 1995.
3. *Analyse de quelques problèmes aux limites elliptiques non linéaires*, Habilitation à Diriger des Recherches, Université Pierre et Marie Curie (Paris VI), 25 February 2003.

BOOKS

- 1) *Treatment Methods of the Elliptic Problems*, Craiova University Press, 1998.
- 2) *Partial Differential Equations*, Craiova University Press, 1999.
- 3) (with D. Motreanu) *Variational and Nonvariational Methods in Nonlinear Analysis and Boundary Value Problems*, Nonconvex Optimization and Its Applications, Vol. 67, Kluwer Academic Publishers, Dordrecht, 388 pp., 2003; (see www.springer.com/prod/b/1-4020-1385-X).
- 4) (with C. Niculescu, Editors), *Mathematical Analysis and Applications: International Conference on Mathematical Analysis and Applications*, Craiova (Romania), 23-24 September 2005, AIP Conference Proceedings Volume 835, American Institute of Physics, 176 pp., 2006; (see <http://proceedings.aip.org/proceedings/confproceed/835.jsp> and <http://www.springer.com/east/home/generic/search/results?SGWID=5-40109-22-173663783-0>).
- 5) *Qualitative Analysis of Nonlinear Elliptic Partial Differential Equations*, Contemporary Mathematics and Its Applications, vol. 6, Hindawi Publ. Corp., 210 pp., 2008; (see <http://www.hindawi.com/books.html>).
- 6) (with M. Ghergu) *Singular Elliptic Problems: Bifurcation and Asymptotic Analysis*, Oxford Lecture Series in Mathematics and its Applications (John M. Ball, Series Editor), vol. 37, Oxford University Press, New York, 320 pp., 2008; (see <http://www.us.oup.com/us/catalog/general/subject/Mathematics/AppliedMathematics>).
- 7) (with T.-L. Rădulescu and T. Andreescu) *Problems in Real Analysis: Advanced Calculus on the Real Axis*, Springer, New York, xx+452 pp., 2009 (see <http://www.springer.com/mathematics/analysis/book/978-0-387-77378-0>).
- 8) (with A. Kristály and C. Varga) *Variational Principles in Mathematical Physics, Geometry and Economics: Qualitative Analysis of Nonlinear Equations and Unilateral Problems*, Encyclopedia of Mathematics (No. 136), Cambridge University Press, Cambridge, 384 pp., 2010 (see <http://www.cambridge.org/catalogue/catalogue.asp?isbn=9780521117821>).
- 9) (with M. Ghergu) *Nonlinear PDEs: Mathematical Models in Biology, Chemistry and Population Genetics*, Springer Monographs in Mathematics, Springer-Verlag, Heidelberg, xviii+392 pp., 2012 (see <http://www.springer.com/mathematics/dynamical+systems/book/978-3-642-22663-2?changeHeader>)
- 10) (with E. Mitidieri and J. Serrin) *Recent Trends in Nonlinear Partial Differential Equations I: Evolution Problems*, Contemporary Mathematics Series, vol. 594, American Mathematical Society, 307 pp., 2013 (see <http://www.ams.org/bookstore?fn=20&arg1=whatsnew&ikey=CONM-594>)
- 11) (with E. Mitidieri and J. Serrin) *Recent Trends in Nonlinear Partial Differential Equations II: Stationary Problems*, Contemporary Mathematics Series, vol. 595, American Mathematical Society, 340 pp., 2013 (see <http://www.ams.org/bookstore?fn=20&arg1=whatsnew&ikey=CONM-595>)

- 12) (with P. Pucci and H. Weinberger, Editors), *Selected Papers of James Serrin*, vol. I, 796 pp., Contemporary Mathematicians, Birkhäuser, Basel, 2013 (see <http://www.springer.com/birkhauser/history+of+science/book/978-3-0348-0684-8>)
- 13) (with P. Pucci and H. Weinberger, Editors), *Selected Papers of James Serrin*, vol. II, 796 pp., Contemporary Mathematicians, Birkhäuser, Basel, 2013 (see <http://www.springer.com/birkhauser/history+of+science/book/978-3-0348-0686-2>)
- 14) (with D. Repovš), *Partial Differential Equations with Variable Exponents: Variational Methods and Qualitative Analysis*, Monographs and Research Notes in Mathematics, Taylor & Francis, Chapman and Hall/CRC, 320 pp., 2015 (see <http://www.crcpress.com/product/isbn/9781498703413>).
- 15) (with A. Sequeira and V. Solonnikov, Editors), *Recent Advances in PDEs and Applications*, Contemporary Mathematics Series, American Mathematical Society, Vol. 666, 404 pp., 2016.
- 16) (with G. Molica Bisci and R. Servadei), *Variational Methods for Nonlocal Fractional Problems*, Encyclopedia of Mathematics and its Applications, Cambridge University Press, Cambridge, Vol. 162, 400 pp., 2016.
- 17) (with G. Kassay), *Equilibrium Problems and Applications*, Mathematics in Science and Engineering, Academic Press, Elsevier, Oxford, book in progress, to appear in 2017.
- 18) (with G. Kassay) *Equilibrium Problems and Applications*, Academic Press, Elsevier, Oxford, book in progress, 2018.
- 19) (with N. Papageorgiou and D. Repovš) *Modern Nonlinear Analysis: Theory and Applications, I-II*, Springer Monographs in Mathematics, Springer-Verlag, Heidelberg, to appear in 2019.
- 20) (with M. Rădulescu and S. Rădulescu) *Selected Problems in Mathematical Analysis*, Problem Books in Mathematics, Springer-Verlag, Heidelberg, book in progress.
- 21) *Elliptic Partial Differential Equations*, Cornerstones Series, Birkhäuser, Boston, book in progress.

EDITOR OF SPECIAL ISSUES

- 1) Guest Editor (with M. Iosifescu and M. Sofonea) of the Proceedings of the Sixth Franco-Romanian Colloquium on Applied Mathematics, Held in Perpignan, September 2–6, 2002, *Annals Univ. Craiova Ser. Mat. Inform.* **30** (2003).
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- 5) Guest Editor (with Claudianor Alves) of the Special Issue *Degenerate and Singular Differential Operators with Applications to Boundary Value Problems*, *Boundary Value Problems* (2011 ISI Impact Factor: 0.911), Volume 2010 (2010).
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11) Guest Editor (with Dušan Repovš) of the Special Issue *Elliptic Equations and Their Synergies, Complex Variables and Elliptic Equations*, in progress.

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- 132) “Large and bounded solutions for a class of nonlinear Schrödinger stationary systems”, *Analysis and Applications* **7** (2009), 391-404 (with A. Ghanmi, H. Maagli and N. Zeddini).
- 133) “Hartman-Stampacchia results for stably pseudomonotone operators and nonlinear hemivariational inequalities”, *Applicable Analysis* **89** (2010), 175-188 (with N. Costea).
- 134) “On a non-homogeneous eigenvalue problem involving a potential: an Orlicz-Sobolev space setting”, *J. Math. Pures Appliquées (Journal de Liouville)* **93** (2010), 132-148 (with M. Mihăilescu and D. Repovš).
- 135) “Turing patterns in general reaction-diffusion systems of Brusselator type”, *Communications in Contemporary Mathematics* **12** (2010), 661-679 (with M. Ghergu).

1. Personal information:

Name and surname: Lucian Beznea

Date and place of birth: 22.08.1957, Tecuci, Romania

Present academic position: Senior researcher at Simion Stoilow Institute of Mathematics of the Romanian Academy and professor at University of Bucharest, Faculty of Mathematics and Computer Science

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Phone number, e-mail address: 0040213196506, e-mail: lucian.beznea@imar.ro

2. Education:

- Faculty of Mathematics, University of Bucharest (diploma thesis), completed with a master thesis in mathematical analysis;
- *Ph. D.*: Doctor in Mathematics at the University of Bucharest, supervised by Prof. Dr. Nicu Boboc.

3. Professional experience:

- Senior researcher at Simion Stoilow Institute of Mathematics of the Romanian Academy, senior researcher first degree since 1999;
- Professor at University of Bucharest, Faculty of Mathematics and Computer Science, since 2012;
- Ph.D. supervisor approved by the Romanian Ministry of Education and Research; five supervised theses in the last three years;
- Director of the Simion Stoilow Institute of Mathematics of the Romanian Academy, Bucharest, Romania, since April 2012.

4. Ten selected publications:

- [1] L. Beznea, N. Boboc, M. Röckner: Quasi-regular Dirichlet forms and L^p -resolvents on measurable spaces. *Potential Analysis* **25** (2006), 269-282. (Top 50%, yellow area)
- [2] L. Beznea, N. Boboc, M. Röckner: Markov processes associated with L^p -resolvents and applications to stochastic differential equations on Hilbert space. *J. Evol. Eq.* **6** (2006), 745-772 (Top 25%, red area)
- [3] L. Beznea, N. Boboc: Feynman-Kac formula for left continuous additive functionals and extended Kato class measures. *Potential Analysis* **30** (2009), 139-164 (Top 50%, yellow area)
- [4] L. Beznea: Potential theoretical methods in the construction of measure-valued Markov branching processes. *J. European Math. Soc.* **13** (2011), 685-707 (Top 25%, red area)
- [5] L. Beznea, A. Cornea, M. Röckner: Potential theory of infinite dimensional Levy processes. *J. Functional Analysis* **261** (2011), 2845-2876. (Top 25%, red area)
- [6] L. Beznea, M. Röckner: From resolvents to cadlag processes through compact excessive functions and applications to singular SDE on Hilbert spaces. *Bull. Sci. Math.* **135** (2011), 844-870. (Top 25%, red area)
- [7] L. Beznea, M. Deaconu, O. Lupascu: Branching processes for the fragmentation equation. *Stoch. Processes and their Applications* **125** (2015), 1861-1885. (Top 25%, red area)
- [8] L. Beznea, O. Lupascu: Measure-valued discrete branching Markov processes. *Trans. Amer. Math. Soc.* **368** (2016), 5153-5176 (Top 25%, red area)
- [9] L. Beznea, M. Deaconu, O. Lupascu: Stochastic equation of fragmentation and branching processes related to avalanches. *J. Statistical Physics* **162** (2016), 824-841. (Top 50%, yellow area)
- [10] V. Barbu, L. Beznea: Measure-valued branching processes associated with Neumann nonlinear semiflows. *J. Math. Anal. Appl.* **441** (2016), 167-182. (Top 50%, yellow area).

5. Research interests: Infinite dimensional stochastic analysis, potential theory, applications to (nonlinear) PDEs.

6. Other academic activities:

- Member of:
 - the Commission Support of East European Mathematicians of the European Mathematical Society, 2011-2014; European Solidarity, 2015-2018;
 - the committee of experts of the Laboratoire Européen Associé CNRS Franco-Roumain (Math Mode), 2008-2015;
 - the directorial committee of the Romanian Mathematical Society, 2012-2017;
 - the scientific committee of *9eme Coll. Franco-Roumain de Math. Appl.*, 2012, Bucharest, two Fields medalists as invited speakers;
 - the editorial boards of the following journals: Proc. of the Romanian Academy, Math. Reports; Revue Roumaine Math. Pures Appl., Ann. Univ. Bucharest, Advances in Pure and Applied Mathematics (De Gruyter).
- Co-editor of ten proceedings volumes.
- Chief of the Potential Theory Task of the EURROMMAT project financed by the European Commission, the *Call for Centers of Excellence* from 1999.
- Co-director (jointly with Michael Röckner), of a research collaboration project between the Simion Stoilow Institute of Mathematics of the Romanian Academy and the University of Bielefeld (Germany), in potential theory and stochastics (2004-2007), supported by DFG and the Romanian Academy.
- Co-organizer (jointly with Michael Röckner) of the workshop “*Potential Theoretical Methods for Infinite Dimensional Processes*”, Bielefeld (Germany), August 2004 (participants from 7 countries).
- Co-organizer of over 25 international conferences.
- Coordinator of the scientific seminar *Potential Theory* (since 2000, jointly with N. Boboc and Gh. Bucur), weekly organized by the Simion Stoilow Institute of Mathematics of the Romanian Academy and the Faculty of Mathematics and Computer Science of the University of Bucharest.

1. Personal information

Name and surname: Radu Purice

Date and place of birth: November 27, 1954

Present academic position: Senior researcher at Simion Stoilow Institute of Mathematics of the Romanian Academy

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Web: www.imar.ro/~purice

2. Education

1974 – 1978: Bachelor degree at University of Bucharest.

1978 – 1979: Master degree in Theoretical Physics at University of Bucharest.

1980 – 1982: Master degree in Mathematical Physics at the Department of Theoretical Physics of Institute of Theoretical-Physics Bucuresti – Magurele.

1990: Ph. D. in Theoretical Physics at the University of Bucharest.

3. Professional experience:

Deputy Director, Institute of Mathematics "Simion Stoilow" of the Romanian Academy, Bucuresti 2012 - 2014

Scientific Secretary, Institute of Mathematics "Simion Stoilow" of the Romanian Academy, Bucuresti 1999 - 2012

Assistant doctorand, Ecole de Physique, Université de Genève, Genève 1984 - 1985

Researcher, National Institute of Physics and Nuclear engineering - Department of Fundamental Physics, Bucuresti 1979 – 1990

Graduate Lecture Series:

Non-equilibrium steady states and currents. Graduate lectures given in the frame of a Common Seminar organized by the University of Aalborg and the University of Århus; Denmark, May 3-15, 2013.

Non-equilibrium steady states and currents. (Quantum Transport and Related Problems in Mathematical Physics) - Summer School, Hammamet, Tunisia 2-7th September 2012

4. Ten selected publications:

1. Grigore, D. R.; Nenciu, G.; Purice, R. On the nonrelativistic limit of the Dirac Hamiltonian. *Ann. Inst. H. Poincaré Phys. Théor.* 51 (1989), no. 3, 231--263.
2. Boutet de Monvel-Berthier, Anne; Georgescu, Vladimir; Purice, Radu A boundary value problem related to the Ginzburg-Landau model. *Comm. Math. Phys.* 142 (1991), no. 1, 1--23.
3. Boutet de Monvel-Berthier, Anne; Manda, Dragos; Purice, Radu Limiting absorption principle for the Dirac operator. *Ann. Inst. H. Poincaré Phys. Théor.* 58 (1993), no. 4, 413--431.
4. Mantoiu, Marius; Purice, Radu Some propagation properties of the Iwatsuka model. *Comm. Math. Phys.* 188 (1997), no. 3, 691--708.

5. Amrein, W. O.; Mantoiu, M.; Purice, R. Propagation properties for Schrödinger operators affiliated with certain C^* -algebras. *Ann. Henri Poincaré* 3 (2002), no. 6, 1215--1232.
 6. Mantoiu, Marius; Purice, Radu The magnetic Weyl calculus. *J. Math. Phys.* 45 (2004), no. 4, 1394--1417.
 7. Viorel Iftimie; Mantoiu, Marius; Purice, Radu Magnetic pseudodifferential operators, *Publications of RIMS*, 43 (2007), no. 3, 585--623.
 8. Mantoiu, Marius; Purice, Radu; Richard, Serge Spectral and propagation results for magnetic Schrödinger operators; a C^* -Algebraic framework, *Journal of Functional Analysis*, 250 (2007), 42--67;
 9. Viorel Iftimie, Marius Mantoiu, Radu Purice: Commutator Criteria for Magnetic Pseudodifferential Operators. *Comm. Partial Diff. Eq.* 35 (2010), 1058—1094.
 10. Horia D. Cornean, Pierre Duclos and Radu Purice: Adiabatic Non-Equilibrium Steady States in the Partition Free Approach, *Annales Henri Poincaré*, Online First™, 4 November 2011.
5. **Research interests:** Mathematical-Physics, Quantum-Mechanics: spectral analysis and propagation estimations for quantum Hamiltonians, the conjugate operator method and its applications in spectral theory and evolution properties, weighted estimations of Hardy type for quantum Hamiltonians, non-equilibrium steady states and transport theory, functional calculus for quantum observables in a magnetic field.

6. **Prizes:** "Gheorghe Titeica" Prize of the Romanian Academy 2002.

7. **Other academic activities:**

Coorganizer of:

1. XIII-eme Colloque Franco-Roumain de Mathematiques Appliques, Iasi, 2016;
2. International Conference: Mathematical aspects of solid state physics, quantum transport and spectral analysis, Bucuresti, 2014;
3. XII-eme Colloque Franco-Roumain de Mathematiques Appliques, Lyon, 2014;
4. XI-eme Colloque Franco-Roumain de Mathematiques Appliques, Bucuresti, 2012;
5. The LEA Math-Mode Workshop , Bucuresti, 2011;
6. 4-th annual meeting of the EU-NCG Network , Bucuresti, 2011;
7. Workshop in Nonlinear Analysis and Mathematical Physics - Romanian - German Symposium on Mathematics and its Applications , Sibiu, May 2009;

Founder with Gh. Nenciu and H.D. Cornean of a threeilateral scientific collaboration on Mathematical models in quantum transport with CPT-Marseille and the University of Aalborg; in addition the collaboration include WIAS Berlin and IAS Dublin.

Co-editor of 3 volume Proceedings (Birkhauser 1982, Kluwer Academic Publishers 1981, World Publishers 2008)

Coordinator of the European Programme **EURROMMAT**

Coordinator of the Romanian team of the **Euro-DGR "Mathematics and Quantum Physics"**

Member in the Management Team of **the POS DRU** Programme of postdoctoral research: *Cercetarea Stiintifica economica, suport al bunastarii si dezvoltarii umane în context european.*

Coordinator of the **National CEx Programme** Deterministic and Stochastic Differential Methods in the Study of Certain Evolution Models (MDDS)

Member of the IMAR research team on the **CNCSIS PCCE** Contract Nr. 8/2010 Sisteme diferentiale in analiza neliniara si aplicatii.

1. Personal information

Name and surname: Maria-Magdalena Boureanu

Date and place of birth: December 28, 1980

Present academic position: Associate Professor, Department of Applied Mathematics, University of Craiova.

Current Address: University of Craiova, 13 A.I. Cuza Street, 200585, Craiova, Dolj, Romania

Phone number and e-mail address: e-mail: mmboureanu@yahoo.com

Web: http://cis01.central.ucv.ro/site/eng_boureanu.htm

2. Education

1999 – 2003: Bachelor degree in Mathematics at University of Craiova.

2004 – 2006: Master degree in Dynamical Systems and Problems of Evolution at University of Craiova.

2005 – 2009: Ph. D. at University of Craiova, Faculty of Mathematics and Computer Science, University of Craiova, Romania,

Ph. D. Thesis: “Topological Methods in the Study of Boundary Value Problems”

Advisor: Professor Vicențiu Rădulescu.

3. Professional experience:

2007 – 2008 Teacher at “Carol I” National College, Craiova, Romania

2009 – 2014 Associated assistant lecturer, Departments of Mathematics, University of Craiova

2010 – 2012 Researcher in the framework of CNCSIS Grant PNII-08/2010, University of Craiova

2011 – 2012 Associated assistant lecturer, Department of Applied Mathematics, University of Craiova

2012 – 2015 Assistant professor, Department of Applied Mathematics, University of Craiova

2015 – present Associate professor, Department of Applied Mathematics, University of Craiova

4. Ten selected publications:

1. M.M. Boureanu, P. Pucci and V. Radulescu, Multiplicity of solutions for a class of anisotropic elliptic equations with variable exponent, *Complex Variables and Elliptic Equations*, **56** (2011), 755-767.
2. M.M. Boureanu, A. Matei and M. Sofonea, Analysis of a contact problem for electroelastic-visco-plastic materials, *Communications on Pure and Applied Analysis*, **11** (2012), 1185-1203.
3. M.M. Boureanu and V. Radulescu, Anisotropic Neumann problems in Sobolev spaces with variable exponent, *Nonlinear Anal. TMA*, **75** (2012), 4471-4482.
4. M.M. Boureanu, C. Udrea and D.N. Udrea, Anisotropic problems with variable exponents and constant Dirichlet condition, *Electron. J. Diff. Equ.*, **2013** (2013), no. 220, 1-13.

5. M.M. Boureanu, A. Matei and M. Sofonea, Nonlinear problems with $p(\cdot)$ -growth conditions and applications to antiplane contact models, *Advanced Nonlinear Studies*, **14**(2014), 295-313.
6. M.M. Boureanu and C. Udrea, No-flux boundary value problems with anisotropic variable exponents, *Communication on Pure and Applied Analysis*, **14**(2015), 881-896.
7. M.M. Boureanu and A. Matei, Singular and degenerate boundary value problems related to the electricity theory, *Mathematical Problems in Engineering*, **2015** (2015), Article ID 865261, 6 pages.
8. M.M. Boureanu, A new class of nonhomogeneous differential operator and applications to anisotropic systems, *Complex Variables and Elliptic Equations*, **61** (2016), 712--730.
9. M.M. Boureanu, V. Rădulescu and D. Repovš, On a $p(\cdot)$ -biharmonic problem with no-flux boundary condition, *Computers & Mathematics with Applications*, **72** (2016), 2505—2515.
10. M.M. Boureanu, Fourth-order problems with Leray-Lions type operators in variable exponent spaces, *Discrete & Continuous Dynamical Systems - S*, **12** (2019), 231—243.

5. **Research interests:** Mathematical Analysis, Functional Analysis, Real Analysis, Partial Differential Equations, Operator Theory, Function Spaces

6. **Prizes:** Seven papers awarded by the Executive Unit for Financing Higher Education, Research Development and Innovation from Romania.

GNAMPA junior research visit scholarship for four months (February-May 2011) at University of Milano Bicocca, Italy.

BITDEFENDER postdoctoral scholarship for five months (February-June 2010) at the Institute of Mathematics "Simion Stoilow" of the Romanian Academy (IMAR), Bucharest, Romania.

Erasmus-Socrates scholarship for three months (March 2003–May 2003) at University of Aveiro, Portugal.

Erasmus-Socrates scholarship for three months (March 2003–May 2003) at University of Aveiro, Portugal.

Leader of the students from the Faculty of Mathematics and Computer Sciences, and representative in the Senate of the University of Craiova (2000-2003).

7. **Other academic activities:**

Research Grants:

- member of the Romanian University of Craiova Grant 19C/27.01.2014; Director: dr. C. Vladimirescu.
- member of the Romanian CNCS Grant PNII-ID-PCE-2011-3-0195; Director: dr. V. Radulescu.
- member of the Romanian CNCS – UEFISCDI Grant PN-II-RU-TE-2011-3-0223; Director: dr. A. Matei.
- member of the Romanian CNCSIS Grant PNII-55/2008; Director: dr. V. Radulescu.
- member of the Romanian CNCSIS Grant PNII-79/2007; Director: dr. V. Radulescu.

Conferences and Workshops:

- Nonlinear Dynamics Workshop, Sinaia, Romania, September 26-27, 2014, participation with the communication entitled "Elliptic problems with variable exponents and no-flux boundary conditions".
- International Workshop on Nonlinear Analysis and Applications to Economics, Craiova, Romania, September 25, 2014.
- The 12th French-Romanian Colloquy of Applied Mathematics, Lyon, France, August 24-30, 2014, participation with the communication entitled "On some applications to antiplane contact models of the variable exponent problems".
- The 10th AIMS Conference on Dynamical Systems, Differential Equations and Applications, Madrid, Spain, July 07-11 2014, participation with the communication entitled "Variable exponent problems involving generalized operators", in the special session "Variational methods for discrete and continuous boundary value problems (with applications)".
- The 8th European Conference on Elliptic and Parabolic Problems, Gaeta, Italy, May 26-30 2014, participation with the communication entitled "On some elliptic problems with variable exponents".
- Workshop on Dispersive PDE's: Models and Dynamics, Pisa, Italy, September 18-20 2013.
- 8th Workshop on Control of Distributed Parameter Systems, Craiova, Romania, July 1-5 2013 (local organizer).

Plenary Lectures:

- "On some nonlinear problems involving variable exponents", University of Nice "Sophia Antipolis", France, January 2013 (<http://www-math.unice.fr/eaubry/seminar.php>).
- "Weak solutions for anisotropic elliptic problems with variable exponent", University of Milano Bicocca, Italy, March 2011.
- The cycle of talks "Boundary value problems for the $p(x)$ -Laplace operator", Potential Theory Seminar, organized by Institute of Mathematics of the Romanian Academy (IMAR) jointly with University of Bucharest, Romania, March 2010.

Research visits:

- University of Nice "Sophia Antipolis", France, January 20–27, 2013.
- University of Milano Bicocca, Italy, May 2–11, 2012.
- University of Milano Bicocca, Italy, January 31–May 30, 2011.
- University of Perpignan, France, November 11–21, 2010.