MIHAI-GHEORGHE MIHĂILESCU

Coordinates

- Correspondence address: Department of Mathematics, 13 A. I. Cuza, 200585 Craiova, Romania
- *E-mail address:* mmihailes@yahoo.com
- URL: https://sites.google.com/site/mmihailes/

1 Education

• August 4 - November 26, 2012 **Postdoctoral Fellow** at the University of Sydney, Australia (sponsored by a *Go8 European Fellowship* funded by the *Group of Eight Australian universities*). Academic supervisor: Florica C. Cîrstea.

• July 24, 2012 Habilitation in Mathematics with the thesis: *The analysis of some PDE's and related problems*. Examiners: Peter Hästö (University of Oulu, Finland), Cătălin Lefter (A. I. Cuza University, Romania), Sergiu Moroianu (Institute of Mathematics *Simion Stoilow* of the Romanian Academy, Bucharest).

• October 29, 2010 **Ph. D.** at Central European University, Budapest, Hungary, with the thesis: *Eigenvalue* problems for some elliptic partial differential operators. Supervisor: Gheorghe Moroşanu. Examiners: Eduard Feireisl (Czech Academy of Sciences), Alexandru Kristály (Babeş Bolyai University, Cluj-Napoca, Romania). This thesis was graded *Summa Cum Laude* and received *CEU Best Dissertation Award* for the academic year 2010-2011.

• January 15, 2007 **Ph. D.** at the University of Craiova, Romania, with the thesis: Variational and Topological Methods in the Study of Semilinear and Quasilinear Problems. Superviser: Vicențiu Rădulescu. Examiners: Lucian Beznea (Institute of Mathematics Simion Stoilow of the Romanian Academy, Bucharest), Alberto Farina (Université de Picardie, France), Radu Precup (Babeş Bolyai University, Cluj-Napoca, Romania). This thesis was graded: Magna Cum Laude.

• 2003 M. Sc. Dynamic Systems and Evolution Equations, at the University of Craiova with the disertation thesis: *Boundary Value Problems for Nonlinear Elliptic Equations*. Adviser: Vicențiu Rădulescu.

• 2001 **B. Sc.** at the University of Craiova with the graduation thesis *The Critical Point Method in the Study of Boundary Value Problems*. Adviser: Vicențiu Rădulescu.

• 1996-1997 **Freshman** at the National Institute of Applied Sciences of Lyon (L'Institut National Des Sciences Appliquées).

• 1996 High School Graduate, Nicolae Bălcescu High School of Craiova (at present, Carol I National College).

2 Activity

• 01.03.2015 - present Professor at the Department of Mathematics of the University of Craiova;

• 01.10.2012 - 28.02.2015 Associate Professor at the Department of Mathematics of the University of Craiova.

• 01.03.2007 - 30.09.2012 Assistant Professor at the Department of Mathematics of the University of Craiova;

• 01.10.2003 - 28.02.2007 Junior Assistant Professor at the Department of Mathematics of the University of Craiova.

3 Scientific grants

• Director of the research project: Typical and Nontypical Eigenvalue Problems for Some Classes of Differential Operators (CNCS-UEFISCDI, project number PN-III-P4-ID-PCE-2016-0035), 12 July 2017-31 December 2019.

• *Member* in the research project: *Analysis of Schrodinger Equations* (CNCS-UEFISCDI, project number PN-II-RU-TE- 2014-4-0007), 1 October 2015-1 October 2017, project director: Ioan-Liviu Ignat. (I became a member of the team of this project starting with 21 of October 2016).

• UBB Advanced Fellowship-Intern financially supported by Star-UBB Institute from Babeş-Bolyai University, no. CNFIS-FDI-2016-0056, 15 November 2016-15 December 2016.

• Director of the research project: Variable Exponent Analysis: Partial Differential Equations and Calculus of Variations (CNCS-UEFISCDI, project number PN-II-ID-PCE-2012-4-0021), 02 September 2013-30 September 2016.

• Director Go8 European Fellowship (a fellowship financially supported by Go8 Australian Universities) at the School of Mathematics and Statistics from the University of Sydney (Australia).

• Director of the research project: Probleme neliniare modelate de operatori diferentiali neomogeni (CNCSIS-UEFISCSU, project number PN II-RU PD-117/2010), 28 July 2010-28 July 2012.

• Member in the research project: Analysis, Control and Numerical Approximations of Partial Differential Equations (CNCSIS-UEFISCSU, project number PN-II-ID-PCE-2011-3-0075), 1 October 2011-1 October 2014, project director: Ioan-Liviu Ignat.

• Member in the research project: Proprietati calitative ale ecuatilor cu derivate partiale si ale aproximarilor lor numerice (CNCSIS PNII TE-4/2010), 28 July 2010-28 July 2013, project director: Ioan-Liviu Ignat.

• *Member* in the research project: *Procese Neliniare Degenerate si Singulare* (CNCSIS PNII 78/2007), 1 October 2007-30 September 2010, project director: Vicențiu Rădulescu.

4 Awards

- "Simion Stoilow" Prize of the Romanian Academy for 2010.
- CEU Best Dissertation Award for the academic year 2010-2011.

5 Conferences, workshops, talks

• Workshop: **Resultats concernant le p-Laplacien avec p non-constant**, November 6, 2007, Institut of Mathematics Simion Stoilow of the Romanian Academy, Bucharest, Romania (title of the talk: *Spectral properties of some nonhomogeneous differential operators*).

http://www.imar.ro/ purice/Inst/Conferinte-07.html

• Workshop: Some Topics in Applied Mathematics, November 21, 2007, Central European University, Budapest, Hungary (title of the talk: A continuous spectrum for non-homogeneous differential operators in variable exponent spaces).

http://web.ceu.hu/math/News&Events/Archives/Archives_2006_2009.html

• Workshop: Calculus of Variations and Optimization, October 2, 2008, Central European University, Budapest, Hungary (title of the talk: *Eigenvalue problems for anisotropic elliptic equations*). http://web.ceu.hu/math/News&Events/Archives/Archives_2006_2009.html

• Workshop on Partial Differential Equations, October 29-30, 2008, Institut of Mathematics Simion Stoilow of the Romanian Academy, Bucharest, Romania (title of the talk: *Eigenvalue problems involving variable exponents*).

http://www.imar.ro/%7Epurice/conferences/2008/workshop-ignat-rp3.pdf

• Workshop: Nonlinear Difference and Differential Equations and Applications, April 2-4, 2009, University of Rousse, Bulgaria (title of the talk: *Eigenvalue problems associated to the Laplace operator*).

• Romanian-German Symposium on Mathematics and Its Applications, Sibiu (Hermannstadt), Romania, May 14-17, 2009 (title of the talk: Some eigenvalue problems associated to the Laplace operator). http://depmath.ulbsibiu.ro/event/rogers2009/

• Workshop: **Applied Analysis**, February 12 (Friday), 2010, Central European University, Budapest, Hungary (title of the talk: *Degenerate elliptic equations involving variable exponent growth conditions*). http://web.ceu.hu/math/News&Events/News&Events.html

• Workshop: Nonlinear Difference and Differential Equations and Applications, April 22-24, 2010, University of Rousse, Bulgaria (title of the talk: Γ -Convergence of functionals in Sobolev spaces with variable exponents).

• Variable Exponent Analysis, June 28 - July 2, 2010, University of Oulu, Finland (title of the talk: Γconvergence for some power-law functionals involving nonstandard growth conditions). http://www.helsinki.fi/ hasto/varexpo/

• Departamental Seminar of the Department of Mathematics and its Applications from the Central European University, Budapest, Hungary, September 28, 2010 (title the talk: An eigenvale problem

for an elliptic differential operator with the Neumann boundary condition). http://web.ceu.hu/math/Research/Sessions.html

• Workshop on Partial Differential Equations, November 25-26, 2010, Institut of Mathematics Simion Stoilow of the Romanian Academy, Bucharest, Romania (title of the talk: Γ -convergence of functionals involving variable exponents).

http://www.imar.ro/math-mode/2010/workshop_imar_2010.pdf

• Workshop for Young Researchers in Mathematics, May 12-13, 2011, "Ovidius" University of Constanța, Constanța, Romania (title of the talk: *Mosco convergence for some power law functionals involving variable exponents*)

http://math.univ-ovidius.ro/workshop/2011/WYRM/

• Workshop on Applied Mathematics, May 26, 2011, Central European University, Budapest, Hungary (title of the talk: Mosco convergence of functionals in Sobolev spaces with variable exponents)

http://mathematics.ceu.hu/news/2011-05-21/

workshop-on-applied-mathematics-dedicated-to-the-20th-anniversary-of-ceu

• The Seventh Congress of Romanian Mathematicians, June 29 - July 5, 2011, "Transilvania" University of Braşov, Braşov, Romania (title of the talk: *Mosco convergence for some power law functionals involving variable exponents*)

http://imar.ro/organization/activities/standalone/congmatro2011/conf.php

• International Conference on Differential & Difference Equations and Applications, July 4-8, 2011, Azores University, Ponta Delgada, Portugal (title of the talk: *Mosco convergence for some power law functionals involving variable exponent growth conditions*)

http://www.spinelas.uac.pt/AzoresConference.htm

• ICNAAM 2011, 9th International Conference of Numerical Analysis and Applied Mathematics, September 19-25, 2011, G-Hotels, Halkidiki, Greece (title of the talk: An existence result for a PDE involving a Grushin type operator and variable exponents)

http://www.icnaam.org/

• Analysis Seminar of the Department of Mathematics and Statistics from Loyola University Chicago, October 17, 2011, (title of the talk: On a maximum principle related with eigenvalue problems involving variable exponents)

http://webpages.math.luc.edu/~mbocea/AnalysisSeminar-Fall2011.html

• AMS Western Section Meeting, October 22-23, 2011, University of Utah, Salt Lake City, Utah, USA (title of the talk: A maximum principle connected with eigenvalue problems involving variable exponents) http://www.ams.org/meetings/sectional/2184_program_ss15.html

• Seminar of the PDE's Research Group from Basque Center of Applied Mathematics, Bilbao, Spain, February 14, 2012, (title of the talk: *Remarks on the first eigenvalue of the* p(x)-Laplace operator) http://www.bcamath.org/public_visitors/ctrl_visitors.php?accion=past

• Workshop for Young Researchers in Mathematics, May 10-11, 2012, "Ovidius" University of Constanța, Constanța, Romania (title of the talk: A maximum principle related with eigenvalue problems involving variable

exponents)

http://math.univ-ovidius.ro/workshop/2012/WYRM/

• PDE Seminar of the School of Mathematics and Statistics from the University of Sydney, September 3, 2012 (title of the talk: *PDE's involving variable exponents*) http://www.maths.usyd.edu.au/u/PDESeminar/index12.html

• Australian Mathematical Society 56-th Annual Meeting, September 24 - 27, 2012, University of Ballarat, Ballarat, Australia (title of the talk: *Mosco convergence for some power law functionals involving variable exponent growth conditions*)

http://www.ballarat.edu.au/schools/school-of-science-and-technology/

australian-mathematical-society-56th-annual-meeting/program/abstracts-by-session

• PDE/Analysis seminar of the Mathematical Sciences Institute, College of Physical & Mathematical Sciences from the Australian National University, November 13, 2012, (title of the talk: *Classification* of isolated singularities for equations involving the Finsler-Laplace operator)

http://maths.anu.edu.au/events/

pdeanalysis-seminar-classification-isolated-singularities-equations-involving-finsler-laplace

• Pure Maths Seminar of the School of Mathematics and Statistics from the University of New South Wales, November 20, 2012, (title of the talk: *Classification of isolated singularities for equations involving the Finsler-Laplace operator*)

http://www.maths.unsw.edu.au/seminars/archive/2012-11?term_node_tid_depth_3=207

• PDE Seminar of the School of Mathematics and Statistics from the University of Sydney, November 21, 2012, (title of the talk: *Classification of isolated singularities for equations involving the Finsler-Laplace operator*)

http://www.maths.usyd.edu.au/u/PDESeminar/index12.html

• Advances in Differential Equations: symmetrizations and related topics, March 14-15, 2013, Babeş-Bolyai University, Cluj-Napoca, Romania (title of the talk: *The asymptotic behavior of some power-law functionals in Sobolev spaces with variable exponents*)

https://sites.google.com/site/idei0241/mini-workshop

• Joint International Meeting of the AMS and the Romanian Mathematical Society, June 27-30, 2013, 1 Decembrie 1918 University, Alba Iulia, Romania (title of the talk: *PDE's involving a variable exponent Grushin-type operator*)

http://imar.ro/ams-ro2013/talks.html

http://www.ams.org/meetings/international/internmtgs

• PDE Seminar of the School of Mathematics and Statistics from the University of Sydney, September 26, 2013, (title of the talk: *The asymptotic behavior of some power-law functionals in Sobolev spaces with variable exponents*)

http://www.maths.usyd.edu.au/u/PDESeminar/

• Australian Mathematical Society 57-th Annual Meeting, September 30 - October 03, 2013, University of Sydney, Sydney, Australia (title of the talk: *Eigenvalue problems in Orlicz-Sobolev spaces for rapidly growing*

operators in divergence form)

http://www.maths.usyd.edu.au/u/austms2013/abstracts.html

• Research Seminar on Nonlinear Operators and Differential Equations, March 13, 2014, "Babeş-Bolyai" University, Cluj-Napoca, Romania (title of the talk: An eigenvalue problem involving a nonhomogeneous operator in divergence form) http://www.math.ubbcluj.ro/~nodeacj/soned.html

• Workshop for Young Researchers in Mathematics, May 22-23, 2014, "Ovidius" University of Constanța, Constanța, Romania (title of the talk: *Eigenvalue problems in Orlicz-Sobolev spaces for rapidly growing operators in divergence form*)

http://math.univ-ovidius.ro/Workshop/2014/WYRM/

• The Eighth Congress of Romanian Mathematicians, June 26 - July 1, 2015, "A. I. Cuza" University of Iaşi, Iaşi, Romania (title of the talk: On the asymptotic behavior of some classes of nonlinear eigenvalue problems involving the p-Laplacian)

http://www.math.uaic.ro/cmr2015/index.php?info

• AMS Central Fall Sectional Meeting - Special Session on Nonlinear PDEs and Calculus of Variations, October 2 - 4, 2015, Loyola University Chicago, Chicago, IL, USA (title of the talk: *Classification of isolated singularities for inhomogeneous operators in divergence form*)

http://www.ams.org/meetings/sectional/2219_program_ss22.html#title

• Workshop for Young Researchers in Mathematics, May 19-22, 2016, "Ovidius" University of Constanța, Constanța, Romania (title of the talk: *Classification of isolated singularities for inhomogeneous operators in divergence form*)

http://math.univ-ovidius.ro/Workshop/2016/WYRM/

• The 6th Workshop Series on Mathematics, June 3-4, 2016, University of Piteşti, Piteşti, Romania (title of the talk: On the asymptotic behavior of some classes of nonlinear eigenvalue problems involving the p-Laplacian) https://www.upit.ro/ro/stiri/the-6th-workshop-series-on-mathematics

• Le 13eme Colloque Franco-Roumain en Mathematiques Appliquees - Special Session on Analyse et Controle des EDP, August 25-29, 2016, Universitatea A. I. Cuza din Iaşi, Iaşi, Romania (title of the talk: *Classification of isolated singularities for inhomogeneous operators in divergence form*) http://www.math.uaic.ro/cfr2016/index.php?info

• Seminarul Științific al Departamentului de Matamatică de la Universitatea "Ovidius" din Constanța, October 21, 2016 (title of the talk: *Inhomogeneous torsional creep problems*) http://math.univ-ovidius.ro/Doc/Evenimente/20161019/Program.pdf

• Seminar on Nonlinear Operators and Differential Equations, November 24, 2016, Universitatea Babeş-Bolyai, Cluj Napoca, Romania (title of the talk: *Inhomogeneous torsional creep problems*) http://www.math.ubbcluj.ro/~nodeacj/soned.html

• Seminar of the Department of Mathematics and Statistics, March 14, 2017, The College of Arts and Sciences, American University of Sharjah, United Arab Emirates (title of the talk: *Inhomogeneous torsional creep problems*)

• Workshop on Nonlinear Analysis on the Occasion of the 65th Birthday of Patrizia Pucci, May 25-27, 2017, Babeş-Bolyai University, Cluj-Napoca, Romania (title of the talk: *Typical and nontypical eigenvalue problems for some classes of differential operators*)

http://www.cs.ubbcluj.ro/nonlinear-analysis-workshop-65th-birthday-of-patrizia-pucci/

6 Conferences organized

• Special Session on Applied Analysis at AMS Western Section Meeting, 22-23 Octombrie, 2011, University of Utah, Salt Lake City, Utah, USA (co-organized with Marian Bocea, Department of Mathematics and Statistics, Loyola University Chicago).

http://www.ams.org/meetings/sectional/2184_program_ss15.html

• Special Session on Calculus of Variations and Partial Differential Equations at Joint International Meeting of the AMS and the Romanian Mathematical Society, June 27-30, 2013, 1 Decembrie 1918 University, Alba Iulia, Romania (co-organized with Marian Bocea - Loyola University Chicago; Liviu Ignat - Institute of Mathematics of the Romanian Academy; Daniel Onofrei - University of Houston).

http://imar.ro/ams-ro2013/CalcVarPDE.php

http://www.ams.org/meetings/international/2193_program_ss8.html#title

• Special Session on Analysis at Le 12ème Colloque Franco-Roumain en Mathématiques Appliquées, August 25-30, 2014, University of Lyon, Lyon, France (co-organized with Daniel Beltiță - Institute of Mathematics of the Romanian Academy; Emmanuel Russ - Joseph Fourier University, Grenoble). http://cfr2014.univ-lyon1.fr/

• Happy PDE's Days, December 8-9, 2016, "Simion Stoilow" Institute of Mathematics of the Romanian Academy, Bucharest, Romania (co-organized with Liviu Ignat - "Simion Stoilow" Institute of Mathematics of the Romanian Academy).

http://www.imar.ro/~dtimotin/Ignat/afisHappyPDE.html

LIST OF SCIENTIFIC PUBLICATIONS (MIHAI MIHĂILESCU)

1 Papers

• M. Mihăilescu and V. Rădulescu, Ground state solutions of non-linear singular Schrödinger equations with lack of compactness, *Mathematical Methods in the Applied Sciences* **26** (2003), 897-906.

• M. Mihăilescu, Nonlinear eigenvalue problems for some degenerate elliptic operators on \mathbb{R}^N , Bull. Belg. Math. Soc. **12** (2005), 435-448.

• M. Mihăilescu, Degenerate Elliptic Problems on Bounded Domains with Robin Boundary Conditions, *PanAmerican Mathematical Journal* **15**(3) (2005), 69-78.

• M. Mihăilescu, Existence and multiplicity of weak solutions for a class of degenerate nonlinear elliptic equations, Boundary Value Problems 2006, Art. ID 41295, 17 pp.

• M. Mihăilescu, Existence and multiplicity of solutions for an elliptic equation with p(x)-growth conditions, Glasgow Mathematical Journal 48 (2006), 411-418.

• M. Mihăilescu, Elliptic problems in variable exponent spaces, Bull. Austral. Math. Soc. 74 (2006), 197-206.

• M. Mihăilescu and V. Rădulescu, A multiplicity result for a nonlinear degenerate problem arising in the theory of electrorheological fluids, *Proc. Roy. Soc. London Ser. A* **462** (2006), 2625-2641.

• M. Mihăilescu and V. Rădulescu, CORRECTION: A multiplicity result for a nonlinear degenerate problem arising in the theory of electrorheological fluids, *Proc. Roy. Soc. London Ser. A* **467** (2011), 3033-3034.

• M. Mihăilescu, Existence and multiplicity of solutions for a Neumann problem involving the p(x)-Laplace operator, Nonlinear Anal. 67 (2007), 1419-1425.

• M. Mihăilescu and V. Rădulescu, Existence and multiplicity of solutions for quasilinear nonhomogeneous problems: an Orlicz-Sobolev space setting, *Journal of Mathematical Analysis and Applications* **330** (2007), Vol. 1, 416-432.

• M. Mihăilescu and V. Rădulescu, Nonhomogeneous boundary value problems in Orlicz-Sobolev spaces, C. R. Acad. Sci. Paris Ser. I Math. **344** (2007), No. 1, 15-20.

• M. Mihăilescu and V. Rădulescu, On a nonhomogeneous quasilinear eigenvalue problem in Sobolev spaces with variable exponent, *Proceedings of the American Mathematical Society* **135** (2007), No. 9, 2929-2937.

• M. Mihăilescu and C. P. Niculescu, An extension of the Hermite-Hadamard inequality through subharmonic functions, *Glasgow Mathematical Journal* **49** (2007), 509-514.

• M. Mihăilescu and I. Rovența, Existence and multiplicity of radial solutions for an elliptic boundary value problem on an annulus, *Bull. Math. Soc. Sci. Math. Roumanie*, Tome 50(98) No. 4, 2007, 331-341.

• M. Mihăilescu, P. Pucci and V. Rădulescu, Nonhomogeneous boundary value problems in anisotropic Sobolev spaces, C. R. Acad. Sci. Paris Ser. I Math. **345** (2007), 561-566.

• M. Mihăilescu and V. Rădulescu, Eigenvalue problems associated to nonhomogeneous differential operators in Orlicz-Sobolev spaces, *Analysis and Applications* 6 (2008), No. 1, 1-16.

• M. Mihăilescu, P. Pucci and V. Rădulescu, Eigenvalue problems for anisotropic quasilinear elliptic equations with variable exponent, *Journal of Mathematical Analysis and Applications* **340** (2008), 687-698.

• M. Mihăilescu and V. Rădulescu, Continuous spectrum for a class of nonhomogeneous differential operators, Manuscripta Mathematica **125** (2008), 157-167.

• M. Mihăilescu and V. Rădulescu, Nonhomogeneous Neumann problems in Orlicz-Sobolev spaces, C. R. Acad. Sci. Paris, Ser. I **346** (2008), 401-406.

• M. Mihăilescu, On a class of nonlinear problems involving a p(x)-Laplace type operator, *Czechoslovak Mathematical Journal* **58** (133) (2008), 155-172.

• M.-M. Boureanu and M. Mihăilescu, Existence and multiplicity of solutions for a Neumann problem involving variable exponent growth conditions, *Glasgow Mathematical Journal* **50** (3) (2008), 565-574.

• M. Mihăilescu, Eigenvalue problems for some nonlinear perturbations of the Laplace operator, *Bull. Math. Soc. Sci. Math. Roumanie*, Tome 51(99) No. 4, 2008, 1-13.

• M. Mihăilescu and V. Rădulescu, Neumann problems associated to nonhomogeneous differential operators in Orlicz-Sobolev spaces, Annales de l'Institut Fourier 58 (6) (2008), 2087-2111.

• M. Mihăilescu and V. Rădulescu, Spectrum in an unbounded interval for a class of nonhomogeneous differential operators, *Bulletin of the London Mathematical Society* **40** (6) (2008), 972-984.

• M. Mihăilescu and V. Rădulescu, A continuous spectrum for nonhomogeneous differential operators in Orlicz-Sobolev spaces, *Mathematica Scandinavica* **104** (2009), 132-146.

A. Kristály, M. Mihăilescu and V. Rădulescu, Two nontrivial solutions for a non-homogeneous Neumann problem: an Orlicz-Sobolev setting, *Proceedings of the Royal Society of Edinburgh: Section A (Mathematics)* 139A (2009), 367-379.

M. Mihăilescu, G. Moroşanu and V. Rădulescu, Eigenvalue problems in anisotropic Orlicz-Sobolev spaces, C. R. Acad. Sci. Paris, Ser., I 347 (2009), 521-526.

• N. Costea and M. Mihăilescu, Nonlinear, degenerate and singular eigenvalue problems on \mathbb{R}^N , Nonlinear Analysis **71** (2009), 1153-1159.

• N. Costea and M. Mihăilescu, On an eigenvalue problem involving variable exponent growth conditions, *Non-linear Analysis* **71** (2009), 4271-4278.

• M. Mihăilescu, V. Rădulescu and S. Tersian, Eigenvalue Problems for Anisotropic Discrete Boundary Value Problems, *Journal of Difference Equations and Applications* **15** (2009), 557-567.

• M. Mihăilescu and D. Stancu-Dumitru, On an eigenvalue problem involving the p(x)-Laplace operator plus a non-local term, *Differential Equations & Applications* 1 (2009), 367-378.

• M. Mihăilescu, V. Rădulescu and D. Repovš, 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.

• M. Mihăilescu and G. Moroșanu, Existence and multiplicity of solutions for an anisotropic elliptic problem involving variable exponent growth conditions, *Applicable Analysis* **89** (2) (2010), 257-271.

• M. Bocea and M. Mihăilescu, Γ-convergence of power-law functionals with variable exponents, *Nonlinear Analysis* **73** (2010), 110-121.

• M. Mihăilescu and V. Rădulescu, Eigenvalue problems with weight and variable exponent for the Laplace operator, *Analysis and Applications* 8 (2010), 235-246.

• M. Mihăilescu and G. Moroşanu, On an eigenvalue problem for an anisotropic elliptic equation involving variable exponents, *Glasgow Mathematical Journal* **52** (2010), 517-527.

• M. Mihăilescu, G. Moroșanu and V. Rădulescu, Eigenvalue problems for anisotropic elliptic equations: an Orlicz-Sobolev space setting, *Nonlinear Analysis* **73** (2010), 3239-3252.

• M. Bocea, M. Mihăilescu and C. Popovici, On the asymptotic behavior of variable exponent power-law functionals and applications, *Ricerche di Matematica* **59** (2010), 207-238.

• M. Mihăilescu and D. Stancu-Dumitru, On a degenerate and singular elliptic equation with critical exponent and non-standard growth conditions, *Studia Universitatis Babeş-Bolyai Mathematica* **LV**, No. 4 (2010), 91-98.

• M. Mihăilescu and V. Rădulescu, Concentration phenomena in nonlinear eigenvalue problems with variable exponents and sign-changing potential, *Journal d'Analyse Mathématique* **111** (2010), 267-287.

• A. Kristály, M. Mihăilescu, V. Rădulescu and S. Tersian, Spectral estimates for a nonhomogeneous difference problem, *Communications in Contemporary Mathematics* **12** (2010), 1015-1029.

• M. Mihăilescu, An eigenvalue problem possessing a continuous family of eigenvalues plus an isolated eigenvalue, *Communications on Pure and Applied Analysis* **10** (2011), 701-708.

• M. Mihăilescu and D. Repovš, Multiple solutions for a nonlinear and non-homogeneous problem in Orlicz-Sobolev spaces, *Applied Mathematics and Computation* **217** (2011), 6624-6632.

• M. Mihăilescu and V. Rădulescu, Sublinear eigenvalue problems associated to the Laplace operator revisited, *Israel Journal of Mathematics* **181** (2011), 317-326.

• M. Mihăilescu, G. Moroșanu and D. Stancu-Dumitru, Equations involving a variable exponent Grushin-type operator, *Nonlinearity* **24** (2011), 2663-2680.

• M. Mihăilescu, V. Rădulescu and D. Stancu-Dumitru, On a Caffarelli-Kohn-Nirenberg type inequality in bounded domains involving variable exponent growth conditions and applications to PDE's, *Complex Variables-Elliptic Equations* 56 (2011), 659-669.

• A. Kristály, M. Mihăilescu and V. Rădulescu, Discrete boundary value problems involving oscillatory nonlinearities: small and large solutions, *Journal of Difference Equations and Applications* **17** (2011), 1431-1440.

• M. Mihăilescu and G. Moroșanu, Eigenvalues of the Laplace operator with nonlinear boundary conditions, *Taiwanese Journal of Mathematics* **15** (2011), 1115-1128.

• M. Mihăilescu and C. Varga, Multiplicity results for some elliptic problems with nonlinear boundary conditions involving variable exponents, *Computers & Mathematics with Applications* **62** (2011), 3464-3471.

• M. Mihăilescu and D. Repovš, An eigenvalue problem involving a degenerate and singular elliptic operator, *Bull. Belg. Math. Soc.*, **18** (2011), 839-847.

• M. Mihăilescu, V. Rădulescu and S. Tersian, Homoclinic solutions of difference equations with variable exponents, *Topological Methods in Nonlinear Analysis* **38** (2011), 277-289.

• M. Mihăilescu and D. Repovš, On a PDE involving the $\mathcal{A}_{p(\cdot)}$ -Laplace operator, Nonlinear Analysis 75 (2012), 975-981.

• M. Bocea, M. Mihăilescu, M. Pérez-Llanos and J. D. Rossi, Models for growth of heterogeneous sandpiles via Mosco convergence, *Asymptotic Analysis* **78** (2012), 11-36.

• M. Bocea and M. Mihăilescu, A Caffarelli-Kohn-Nirenberg inequality in Orlicz-Sobolev spaces and applications, *Applicable Analysis* **91** (2012), 1649-1659.

• M. Mihăilescu and D. Stancu-Dumitru, Anisotropic quasilinear elliptic equations with variable exponent, J. Korean Math. Soc. 49 (2012), 1123-1138.

• M. Mihăilescu and G. Moroșanu, An existence result for a nonhomogeneous problem in \mathbb{R}^2 related to nonlinear Hencky-type materials, *Nonlinear Analysis: Real World Applications* **14** (2013), 1466-1476.

• M. Bocea and M. Mihăilescu, Eigenvalue problems in Orlicz-Sobolev spaces for rapidly growing operators in divergence form, *J. Differential Equations* **256** (2014), 640-657.

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