

CURRICULUM VITAE

Florin ISAIA

Transilvania University of Brasov
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EDUCATION

-University of Bucharest, Department of Mechanics and Equations, 14 Academiei St, 010014 Bucharest, Romania, 1999-2006

Ph.D. in Mathematics, 2007

-Area of Specialization: Partial Differential Equations

-Ph.D. thesis: *Pohožaev type identities and non-existence results for the p -Laplacian and the $p(x)$ -Laplacian*

-Advisor: George DINCA (University of Bucharest, Doctor Honoris Causa at Sorbonne University)

-Thesis Committee: Viorel BARBU (Alexandru Ioan Cuza University of Iasi), Petru JEBELEAN (West University of Timisoara), Constantin NICULESCU (University of Craiova)

-Transilvania University of Brasov, Faculty of Mathematics and Computer Science
50 Iuliu Maniu St, 500091 Brasov, Romania, 1997-1998

M.S. in Mathematics, 1998

-Transilvania University of Brasov, Faculty of Mathematics and Computer Science
50 Iuliu Maniu St, 500091 Brasov, Romania, 1992-1997

B.A. in Mathematics and Computer Science, 1997

RESEARCH INTERESTS

- Superposition operators between higher-order Sobolev spaces: necessary and sufficient conditions ensuring the well-definedness, the continuity, the boundedness, and the higher-order chain rule
- Pohožaev type and Pucci-Serrin type variational identities for divergence type equations
- Non-existence theorems for divergence type equations
- Fixed point theorems for condensing maps using the topological degree for α -condensing perturbations of the identity
- Existence theorems for nonlinear integral equations

TEACHING EXPERIENCE

Transilvania University of Brasov, Department of Mathematics and Computer Science, 50 Iuliu Maniu St, 500091 Brasov, Romania, 1998-present

-**Associate Professor**, 2016-present

Courses: Partial Differential Equations, Variational Methods, Engineering Mathematics

-**Lecturer**, 2004-2016

Courses: Partial Differential Equations, Calculus of Variations, Theoretical Mechanics, Engineering Mathematics

-**Assistant Professor**, 2001-2004

Seminars: Ordinary Differential Equations, Partial Differential Equations, Calculus of Variations, Theoretical Mechanics, Mathematical Analysis, Engineering Mathematics

-**Preparatory Professor**, 1998-2001

Seminars: Ordinary Differential Equations, Mathematical Analysis, Engineering Mathematics

PUBLICATIONS (selection)

1. F. Isaia: *On the autonomous Nemytskii operator between Sobolev spaces in the critical and supercritical cases: well-definedness and higher-order chain rule*, **Nonlinear Analysis: Theory Methods & Applications**, 214 (2022) 112576, 1-27

2. F. Isaia: *On the superposition operator between Sobolev spaces: well-definedness, continuity, boundedness, and higher-order chain rule*, **Houston Journal of Mathematics**, 41 (2015), no. 4, 1277-1294
3. F. Isaia: *Superposition operators between Sobolev spaces and a non-existence result of higher-order regular solutions for the p -Laplacian*, **Nonlinear Analysis: Theory Methods & Applications**, 117 (2015), 87-98
4. G. Dinca and F. Isaia: *Superposition operators between higher-order Sobolev spaces and a multivariate Faà di Bruno formula: supercritical case*, **Advanced Nonlinear Studies**, 14 (2014), 137-158
5. G. Dinca and F. Isaia: *On the continuity of superposition operators between higher-order Sobolev in the supercritical case*, **Annals of the University of Bucharest (mathematical series)**, 4 (LXII) (2013), 455-478
6. G. Dinca and F. Isaia: *On superposition operators between higher-order Sobolev spaces and a multivariate Faà di Bruno formula: the subcritical case*, **Differential and Integral Equations**, 26 (2013), 11-58
7. G. Dinca and F. Isaia: *Generalized Pohožaev and Pucci-Serrin identities and non-existence results for $p(x)$ -Laplacian type equations*, **Rendiconti del Circolo Matematico di Palermo**, 59 (2010), 1-46
8. G. Dinca and F. Isaia: *Generalized Pohožaev identity and a non-existence result for the p -Laplacian: weak solutions*, **Advances in Differential Equations**, 14 (2009), 497-540
9. F. Isaia: *On a nonlinear integral equation without compactness*, **Acta Mathematica Universitatis Comenianae**, Vol. LXXV, No. 2(2006), 233-240
10. F. Isaia: *An existence result for a nonlinear integral equation without compactness*, **PanAmerican Mathematical Journal**, 14 (2004), 93-106

INTERNATIONAL CONFERENCES (selection)

1. The Eighth Congress of Romanian Mathematicians, June 26-July 1, 2015, Iasi, Romania
2. Le Deuxième Colloque Franco-Roumain en Mathématiques Appliquées, 25-30 août 2014, Lyon, France

3. Joint International Meeting of the American Mathematical Society and the Romanian Mathematical Society, June 27-30, 2013, Alba Iulia, Romania
4. The Seventh Congress of Romanian Mathematicians, June 29-July 5, 2011, Brasov, Romania
5. The Fifth World Congress of Nonlinear Analysts, July 2-9, 2008, Orlando, Florida, USA
6. The Sixth Congress of Romanian Mathematicians, June 28-July 4, 2007, Bucharest, Romania

SCIENTIFIC SEMINARS

Invited lectures at:

- Université Catholique de Louvain** (Belgium), Département de Mathématiques, Séminaires d'analyse non linéaire, November 2009
- University of Bucharest**, Scientific Seminar of the Department of Mechanics and Equations, May 2007

RESEARCH PROJECTS

1. Project of Researchers' Mobility: *Generalized Pohožaev identities and non-existence results for p -Laplacian and $p(x)$ -Laplacian*, Contract No. MC_3/02.2008 with CNCSIS (Romania), 2007, Director
2. Grant CEEEX, CERES, 2-CEex06-11-12/25.07.2006: *Mathematical Modeling in continuum mechanics. Applications in science of materials*, 2006-2008, Member

OTHER SCIENTIFIC ACTIVITIES

- Reviews for the American Mathematical Society: **64**
- Reviews for the following journals: **Mathematische Nachrichten, Journal of Integral Equations and Applications, Boundary Value Problems, Fixed Point Theory and Applications, Bulletin of the Transilvania University of Brasov-Series III (Mathematics. Informatics. Physics)**

PROFESSIONAL MEMBERSHIPS

-Affiliate member of the American Mathematical Society

LANGUAGES

-English

-French

Assoc. Prof. PhD Florin ISAIA