

CURRICULUM VITAE

Boris Muha

Adresa

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Obrazovanje

Dr.sc. matematike, Prirodoslovno-matematički fakultet, Sveučilište u Zagrebu, 2010, Mentor: Prof. Zvonimir Tutek

Dipl.ing. matematike, Prirodoslovno-matematički fakultet, Sveučilište u Zagrebu, 2003, Mentor: Prof. Zvonimir Tutek

Radno iskustvo

2014 – , Docent, Matematički odsjek, Prirodoslovno-matematički fakultet, Sveučilište u Zagrebu

2004 – 2014, PMF-MO, Sveučilište u Zagrebu

(2004–2010 asistent; 2010– 2014 viši asistent)

2013 Tra/Svi – gostujući profesor, Department of Mathematics, University of Houston

2013 Velj/Ožu – gostujući istraživač, Basque Center for Applied Mathematics (BCAM), Bilbao

2011 – 2012, Postdoktorand, Department of Mathematics, University of Houston

Nagrade

Rektorova nagrada Sveučilišta u Zagrebu, nalov: *Interaktivni web simulator toka fluida*

Odabrani projekti

2014-2017, HRZZ projekt Mathematical Analysis of Multi-Physics Problems Involving Thin, Composite Structures, and Fluids (Suradnik)

2013-2016, Fluid multi-structure interaction problems, National Science Foundation DMS-1311709 (Investigator)

Velj/Ožu 2013 - ESF Exchange Grant OPTPDE 4171 (1 mjesec)

2011-2012 - Moving-boundary problems in blood flow, National Science Foundation NSF DMS-0806941 (Research Scientist)

2011-2012 - Computational Modeling of Echocardiographic Assessment of Mitral Regurgitation, Texas Higher Education Board (ARP-Mathematics) 003652-0023-2009 (Postdoctoral Fellow)

Radovi:

Ukupan broj publikacija: 14

Puna bibliografija je dostupna na: <http://bib.irb.hr/lista-radova?autor=267374>

Citati: 31 (WoS),

Odabrani radovi:

- B. Muha, *A note on optimal regularity and regularizing effects of point mass coupling for a heat-wave system*, Journal of Mathematical Analysis and Applications, Vol. 425 (2), 1134–1147
- S. Mabuza, S. Canic, B. Muha, *Modeling and analysis of reactive solute transport in deformable channels with wall adsorption-desorption*, accepted in Mathematical Methods in the Applied Sciences
- M. Bukac, S. Canic, B. Muha, *A partitioned scheme for fluid-composite structure interaction problems*, Journal of Computational Physics, Vol. 281, 493–517, 2015.
- B. Muha, S. Čanić, *Existence of a solution to a fluid–multi-layered-structure interaction problem*, Journal of Differential Equations 256 (2014), 658–706
- M. Bukac, S. Canic, R. Glowinski, B. Muha, A. Quaini, *A Modular, Operator Splitting Scheme for Fluid-Structure Interaction Problems with Thick Structures*, International Journal for Numerical Methods in Fluids, Vol. 74 (8), 577–604, 2014
- S. Canic, B. Muha, M. Bukac, *Stability of the kinematically coupled b-scheme for fluid-structure interaction problems in hemodynamics*, International Journal of Numerical Analysis & Modeling, Vol. 12 (1), 54–80, 2015
- B. Muha, S. Čanić, *Existence of a Weak Solution to a Nonlinear Fluid–Structure Interaction Problem Modeling the Flow of an Incompressible, Viscous Fluid in a Cylinder with Deformable Walls*, Archive for Rational Mechanics and Analysis 207 (2013), 919–968
- S. Canic, B. Muha, and M. Bukac, *Fluid-structure interaction in biomedical applications, Book Chapter: "Fluid-structure interaction with multiple structural layers: theory and numerics"*, Invited Contribution to Book Series: "Advances in Mathematical Fluid Mechanics" Eds. T. Bodnar, G.P Galdi, S. Necasova. Springer/Birkhouser. 2014 (ISBN 978-3-0348-0821-7), pp. 79–195

Studenti:

Marija Galic (doktorski student, 2015 –)

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Nedavne pozvane prezentacije:

- Mathematical Modeling In The Function of Cardiovascular System, Rijeka, June 2015.
- Mathematical Colloquium, Department of Mathematics, University of Osijek, May, 2015.
- IFIP TC 7 / 2013 System Modelling and Optimization, Klagenfurt, Austria, Sep. 2013.
- Research seminar Analysis, Stochastics and Mathematical Physics, TU Chemnitz, Chemnitz, Germany, Sep. 2013.
- Seminar for Analysis and Foundations of Mathematics, Faculty of Sciences, University of Novi Sad, Serbia, June 2013.
- Seminar on Partial Differential Equations, Department of Mathematics, University of Houston, Houston, USA, April 2013.
- ERC-NUMERIWAVES Seminar, BCAM, Bilbao, Spain, February, 2013.

Profesionalna djelatnost

- Koorganizator minisimpozija "The Fluid-Structure Interaction: Analysis, Numerics and Applications" at SIAM Conference on Analysis of PDEs (PD13), Orlando, FL, USA, Dec. 2013.
- Referee za Mathematical Models and Methods in the Applied Sciences (M3AS), Discrete and Continuous Dynamical Systems - Series S (DCDS-S), Nonlinearity, SIAM Journal on Numerical Analysis (SINUM), Differential Equations and Applications (DEA), Computers and Mathematics with Applications
- Reviewer za AMS Mathematical Reviews.