

CURRICULUM VITAE

RNDr. Miroslav Bulíček, Ph.D.

CONTACT INFORMATION	Mathematical Institute of Charles University Sokolovská 83 186 75 Prague, Czech republic	Voice: 00420 777 612369 E-mail: mbul8060@karlin.mff.cuni.cz http://www.karlin.mff.cuni.cz/~mbul8060
PERSONAL DATA	Date and place of birth: Address:	22.11.1979 Humpolec, Czech Republic Pecháčkova 15 318 00 Plzeň - Skvrňany, Czech Republic
POSITION	Mathematical Institute of Charles University, Faculty of Mathematics and Physics, October 2006-2011: <i>Researcher</i> (financed by the Jindřich Nečas center for mathematical modeling) January 2012-now: <i>Senior Assistant Professor</i>	
INTEREST	Partial differential equations, continuum thermodynamics, mathematical modeling	
EDUCATION	Charles University - Faculty of Mathematics and Physics Ph.D. Degree; Program: Mathematical and Computational Modeling; September 2003 - September 2006, Supervisor: Josef Málek Master Degree; Program: Mathematical modeling in physics and technology; September 1998- June 2003, Supervisor: Josef Málek.	
SCIENTIFIC EXPERIENCE	Foreign stays - one month and longer University of Bonn, Germany, February 2016 University of Bonn, Germany, July 2015 University of Warsaw, Poland, June 2015 University of Bonn, Germany, September–October 2014 University of Warsaw, Poland, June 2014 University of Bonn, Germany, July 2013 University of Bonn, Germany, September–November 2012 University of Bonn, Germany, January–February 2012 University of Bonn, Germany, September 2011 University of Bonn, Germany, November 2010 University of Bonn, Germany, February 2010 University of Bonn, Germany, November 2009 University of Bonn, Germany, October 2008 ETH Zürich, Switzerland, June–July 2008 Helsinki University of Technology, Finland, August–September 2005	

Invited lectures/series of lectures

Incompressible fluids with pressure dependent viscosities fulfilling $\nu(p, \cdot) \rightarrow \infty$ as $p \rightarrow \infty$ invited lecture at minisymposium "Recent progress in mathematical fluid mechanics", Equadiff 07, Wien, Austria, 2007

Mathematical Analysis of Unsteady Flows of Fluids with Pressure, Shear-rate and Temperature Dependent Material Moduli, Winter school on Non-Newtonian Fluids, Korbielów, Poland, February 2009

On existence analysis for unsteady flow of incompressible fluids with implicit constitutive relation for Cauchy stress in Orlicz space setting, invited lecture at special session "Navier-Stokes Equations and Related Problems", The 8th AIMS Conference on Dynamical Systems, Differential Equations and Applications, Dresden, Germany, 2010

On the analysis of unsteady flows of implicitly constituted incompressible fluids; invited lecture at minisymposium "Implicitly constituted material models: modeling and analysis" - 6th European Congress of Mathematics, Kraków, Poland, July 2012

On scalar hyperbolic laws with discontinuous fluxes; invited lecture at minisymposium "Hyperbolic Conservation Laws" - 6th European Congress of Mathematics, Kraków, Poland, July 2012

Regularity issues in systems describing flows of incompressible fluids; invited lecture at workshop "Model reduction in continuum thermodynamics: Modeling, analysis and computation", BIRS, Canada, September 2012

On implicitly constituted incompressible fluids; series of lectures at the 13th School Mathematical Theory in Fluid Mechanics, Kácov, Czech Republic, 2013

Mathematical analysis of models describing the motion of implicitly constituted materials; invited lecture at the workshop "Implicitly constituted materials: Modeling, analysis, and computing", Liblice, Czech Republic, 2013

On Hölder continuity of solution to elliptic systems & variational integrals; invited lecture at "Equadiff 13", Prague, Czech Republic, 2013

On existence theory for general nonlinear elliptic and parabolic equations with bad data; invited series of lectures at 10th international school on "Nonlinear Analysis, Function Spaces and Applications (NAFSA10)", Třešť, Czech Republic, 2014

Large data analysis for the Kolmogorov two-equation model of turbulence; invited lecture in minisymposium at "Equadiff 15", Lyon, France, 2015

Limiting strain models in elasticity theory and variational integrals with linear growth; invited lecture at the third Workshop of the GAMM Activity Group "Analysis of Partial Differential Equations", University of Kassel, October, 2015

Scientific projects

project No. 6/2005/R of Grant agency of Charles University (Nonlinear model of continuum mechanics)-member of the team 2005-2006

project No. 201/09/0917 of Grant agency of Czech Republic (Mathematical and computer analysis of evolutionary processes in nonlinear viscoelastic fluids)-member of the team 2009-2013

project ERC-CZ no. LL1202 of Ministry of Education, Youth and Sports, Czech Republic (MORE)-member of the team 2012-

project Qualitative Analysis of Incompressible Navier-Stokes-Fourier Equations funded by Neuron - fund for support of science-principal investigator 2012-2014

Organization of international workshops/schools

EVEQ 2008, International Summer School on Evolution Equations, Prague, Czech Republic, June 2008 (chief of the organizing committee)

EVEQ 2012, International Summer School on Evolution Equations, Prague, Czech Republic, June 2012 (chief of the organizing committee)

Regularity theory for elliptic and parabolic systems and problems in continuum mechanics, International workshop, Telč, Czech Republic, May 2014 (chief of the scientific and organizing committees)

Regularity theory for elliptic and parabolic systems and problems in continuum mechanics, International workshop, Telč, Czech Republic, April 2016 (chief of the scientific and organizing committees)

EVEQ 2016, International Summer School on Evolution Equations, Prague, Czech Republic, July 2016 (member of the organizing committee)

PEDAGOGICAL
EXPERIENCE

Semestral lectures

Partial differential equations 1, (2013/2014, 2015/2016)

Partial differential equations 2, (2013/2014)

Nonlinear partial differential equations I, (2011/2012, 2012/2013, 2013/2014, 2015/2016)

Nonlinear partial differential equations II, (2011/2012, 2012/2013, 2013/2014)

Mathematical Analysis of Models in Non-Newtonian Fluid Thermodynamics, (2007/2008, 2008/2009, 2015/2016)

Qualitative properties of weak solutions to PDE's, (2009/2010, 2010/2011, 2012/2013, 2013/2014)

Regularity of solutions of Navier-Stokes' equations, (2009/2010)

Tutorials/Seminars

Regularity of weak solutions to PDE's, (2009/2010, 2010/2011, 2011/2012)

Mathematics for Physicists II, (2003/2004, 2006/2007)

Mathematical Analysis 1b, (2005/2006)

Mathematical Analysis I, (2007/2008)

Mathematics for Physicists III, (2008/2009)

Partial Differential Equations II, (2008/2009)

Supervising of dissertation/master/bachelor thesis

Jan Korous, (bachelor thesis, defended 2007)

Adam Rubal, (bachelor thesis, defended 2008)

Petr Bulušek, (bachelor thesis, defended 2009)

Erika Maringová (master thesis, defended 2015)

Adam Rubal, (master thesis)

Lenka Špinová (master thesis)

Erika Maringová (dissertation thesis)

Consultant of dissertation/master thesis

Martin Holeček, (master thesis, defended 2007)

Veronika Fišerová, (master thesis, defended 2008)

Jan Pušman, (master thesis, defended 2009)

Karel Vácha, (master thesis, defended 2010)

Petra Pustějovská, (dissertation thesis, defended 2012)

Oldřich Ulrych, (dissertation thesis, defended 2014)

Josef Žabenský (dissertation thesis, defended 2015)

Supervisor of doctoral grants

the project GAUK 309811/2011 (Mathematical analysis and computer simulations of models of incompressible fluids with concentration dependent material moduli)-doctoral project 2011-2013

PUBLICATIONS

Bibliographical data

Number of original articles: **46**
In journals with impact factor: **38**
In book **3**
In refereed not-impacted journals: **5**

Citation report (February 2016)

	Web of Science	Scopus	MathScinet
Number of citations:	221	232	195
Without self-citing articles:	160	163	
H-index:	7	7	7

REFERENCE

List of persons who can give reference about me and my qualification:

prof. RNDr. Josef Málek, CSc., DSc.

Mathematical Institute of Charles University,
Faculty of Mathematics and Physics,
Sokolovská 83, 186 75 Praha 8, Czech Republic
Tel: +420 221 913 220,
Email: malek@karlin.mff.cuni.cz

prof. K. R. Rajagopal Texas A&M University,

Department of Mechanical Engineering,
3123 TAMU,
College Station TX 77843-3123, United States of America,
Tel: + 1 979 862 4552,
Email: krajagopal@tamu.edu

prof. Jens Frehse

Institute for Applied Mathematics,
Department of Applied Analysis,
University of Bonn,
Endenicher Allee 60, 53115 Bonn, Germany,
Tel: +49 (0)228 73 3141,
Email: erdbeere@iam.uni-bonn.de

prof. Andrea Cianchi

Dipartimento di Matematica e Applicazioni per l'Architettura,
Università di Firenze,
Piazza Ghiberti 27, 50122 Firenze, Italy,
Tel: +39 (0)552055407,
Email: cianchi@unifi.it

prof. Roger Lewandowski

IRMAR , UMR CNRS 6625,
Université Rennes1,
Campus Beaulieu, 35042 Rennes cedex, France,

Tel: +(33) 223235864,
Email: Roger.Lewandowski@univ-rennes1.fr

prof. Endre Süli

Mathematical Institute,
University of Oxford,
Radcliffe Observatory Quarter, Woodstock Road, Oxford OX2 6GG, United Kingdom,
Tel: +44 1865 615318,
Email: Endre.Suli@maths.ox.ac.uk