Curriculum vitae Dr. Hana Mizerová

Personal details

Date, place of birth:	November 10th, 1988 in Trnava, Slovakia
Nationality:	Slovak
Email:	mizerova@math.cas.cz, mizerova@fmph.uniba.sk

Academic achievements

2015   **Doctor of Natural Sciences in Mathematics (Dr. rer. nat.)**
summa cum laude
Johannes Gutenberg University Mainz, Germany

2012   **Master of Science in Mathematics (Mgr.)**
with honours
Comenius University in Bratislava, Slovakia

2010   **Bachelor of Science in Mathematics (Bc.)**
with honours
Comenius University in Bratislava, Slovakia

Research and teaching experience

02/2018 - present   **Assistant Professor**
Comenius University in Bratislava

10/2017 - 01/2018   **PostDoc researcher**
Czech Academy of Sciences, Prague
within   *ERC Advanced Grant "Mathematical Thermodynamics of Fluids"*

04/2017 - 09/2017   **PostDoc researcher**
Johannes Gutenberg University Mainz

02/2017 - 03/2017   **Junior Simons Professorship**
Polish Academy of Sciences, Banach center, Warsaw
within   *Simons Semester "CrossFields PDEs"*

12/2015 - 03/2017   **scientific assistant**
Institute of Mathematics, Johannes Gutenberg University Mainz

09/2013 - 03/2014   **research stay**
Waseda University in Tokyo

12/2012 - 12/2015   **PhD student**
Johannes Gutenberg University Mainz
within   IRTG 1529 *"Mathematical Fluid Dynamics,"* and partially within
CRC TRR 146 *"Multiscale Simulation Methods for Soft Matter Systems"*
funded by *German Research Foundation DFG*

09/2012 - 12/2012   **PhD student and scientific assistant**
Institute of Mathematics, Johannes Gutenberg University Mainz

Grants and received funding

01/2018 - 12/2020   **Oscillations and concentrations versus stability in the equations of mathematical fluid dynamics (18-05974S)**
team member

10/2017 - 01/2018   **Mathematical Thermodynamics of Fluids (MATHEF(320078))**
PostDoc researcher

04/2017 - 09/2017   **Uniformly stable numerical schemes for multiscale weakly compressible flows**
PostDoc researcher

12/2012 - 12/2015   **DFG IRTG 1529 *"Mathematical Fluid Dynamics"***
doctoral scholarship

07/2017, 01/2016   **travel grants** from Internal University Research Funding of JGU Mainz

07/2016   **travel grant** from German Academic Exchange Service DAAD

Academic Prizes and Awards

2016 *Prize of the Faculty for excellent dissertation thesis*
Faculty of Physics, Mathematics and Computer Science, JGU Mainz

2012 *Award of the Rector for excellent master thesis*
Comenius University in Bratislava

Invitation to international conferences and workshops

05/2018 *Workshop on Mathematical Fluid Dynamics*, IRTG 1529, Bad Boll

11/2016 *KI-Net Young Researches Workshop: Stochastic and deterministic methods in kinetic theory*, Durham, North Carolina

11/2016 *Oberwolfach Seminar: Different Mathematical Perspectives on Description of Unresolved Scales in Multiscale Systems*, Oberwolfach

10/2016 *CoMFoS16: Mathematical Analysis of Continuum Mechanics and Industrial Applications II*, Fukuoka

03/2016 *Algoritmy 2016*, Podbanské

List of publications

2017 M. Lukáčová-Medvid'ová, H. Mizerová, Š. Nečasová, M. Renardy:
Global existence result for the generalized Peterlin viscoelastic model
SIAM J. Math. Anal. 49-4, pp. 2950-2964, DOI:10.1137/16M1068505

2017 M. Lukáčová-Medvid'ová, H. Mizerová, H. Notsu, M. Tabata:
Numerical analysis of the Oseen-type Peterlin viscoelastic model by the stabilized Lagrange-Galerkin method, Part I: A nonlinear scheme
ESAIM: M2AN 51, pp. 1637-1661, DOI:10.1051/m2an/2016078

2017 M. Lukáčová-Medvid'ová, H. Mizerová, H. Notsu, M. Tabata:
Numerical analysis of the Oseen-type Peterlin viscoelastic model by the stabilized Lagrange-Galerkin method, Part II: A linear scheme
ESAIM: M2AN 51, pp. 1663-1689, DOI:10.1051/m2an/2017032

2016 M. Lukáčová-Medvid'ová, H. Mizerová, B. She, J. Stebel:
Error analysis of finite element and finite volume methods for some viscoelastic fluids, *J. Numer. Math. 24(2)*, pp. 105-123,
DOI:10.1515/jnma-2014-0057

2015 M. Lukáčová-Medvid'ová, H. Mizerová, Š. Nečasová:
Global existence and uniqueness result for the diffusive Peterlin viscoelastic model, *Nonlinear Anal.-Theor. 120*, pp. 154–170,
DOI:10.1016/j.na.2015.03.001

Submitted papers

2018 E. Feireisl, M. Lukáčová-Medvid'ová, H. Mizerová:
Convergence of finite volume schemes for the Euler equations via dissipative measure–valued solutions, arXiv:1803.08401

2017 P. Gwiazda, M. Lukáčová-Medvid'ová, H. Mizerová, A. Świerczewska-Gwiazda: Existence of global weak solutions to the kinetic Peterlin model, arXiv:1707.02783

Thesis

2015 Analysis and numerical solution of the Peterlin viscoelastic model
Johannes Gutenberg University Mainz
pdf: http://ubm.opus.hbz-nrw.de/volltexte/2015/4231/

Language skills

Slovak native speaker
English fluent
German good working knowledge
Spanish basic communication skills