Danica Basarić

Date of birth 5 August 1992
Place of birth Kragujevac, Serbia
Nationality Serbian
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Research experience

PostDoctoral Researcher   Jul. 2021 – present
Institute of Mathematics, Czech Academy of Sciences   Prague, Czech Republic

Education

Ph. D. | *Mathematics*   Apr. 2018 – March 2021
Technische Universität Berlin   Berlin, Germany
Title of the thesis: *Semiflow selections and vanishing viscosity limits in fluid dynamics*
Advisor: Prof. Eduard Feireisl
Final degree: Summa cum laude

Master of Science | *Mathematics*   Oct. 2015 – Feb. 2018
Universitá degli Studi di Milano   Milan, Italy
Title of the thesis: *Strichartz estimates for dispersive equations*
Advisor: Prof. Marco Peloso
Final degree mark: 110/110 cum laude

Bachelor of Science | *Mathematics*   Sep. 2011 – Sep. 2015
Universitá degli Studi di Milano   Milan, Italy
Final degree mark: 102/110

Scientific certificate | *Scientific High School*   Sep. 2006 – Jul. 2011
Liceo Scientifico G. B. Grassi   Saronno (VA), Italy
School-leaving examination mark: 100/100

Publications

D. Basarić   2021
Semiflow selection to models of general compressible viscous fluids
Journal of Mathematical Fluid Mechanics **23**, Article number: 2
DOI: 10.1007/s00021-020-00527-1

D. Basarić   2020
Vanishing viscosity limit for the compressible Navier-Stokes system via measure-valued solutions
Nonlinear Differential Equations and Applications NoDEA **27**, Article number: 57
DOI: 10.1007/s00030-020-00659-3

D. Basarić   2020
Semiflow selection for the compressible Navier-Stokes system
Journal of Evolution Equations **21**: 277-295
DOI: 10.1007/s00028-020-00578-x

Preprints

D. Basarić   2021
Weak-strong uniqueness principle for compressible barotropic self-gravitating fluids
Submitted
arXiv preprint: arXiv:2109.03653

D. Basarić   2021
Existence of weak solutions for models of general compressible viscous fluids with linear pressure
Submitted
arXiv preprint: arXiv:2102.08095

CONFERENCES AND PRESENTATIONS

Workshop on Fluids under control   Aug. 2021
Prague, Czech Republic
Seminar talk: *Semiflow Selection and its Applications in Fluid Dynamics*

Online Curse on Mathematical Analysis of Geophysical Models and Data Assimilation   Jun. 2020

Prague-Berlin Joint Meeting   Jan. 2020
Prague, Czech Republic
Seminar talk: *Semiflow Selection and its Applications in Fluid Dynamics*

Winter School on Gradient Flows and Variational Methods in PDEs   Nov. 2019
Ulm, Germany

Workshop on Nonlinear Analysis and its Applications in Continuum Mechanics   Nov. 2019
Toulon, France
Seminar talk: *Semiflow selection for the compressible Navier-Stokes system*

PhD²ays   Oct. 2019
Milan, Italy
Seminar talk: *Vanishing viscosity limit for the compressible Navier-Stokes system via measure-valued solutios*

Berlin-Prague Workshop on PDE   Aug. 2019
Berlin, Germany
Seminar talk: *Semiflow selection for the compressible Navier-Stokes system*

CIME School on Progress in Mathematical Fluid Dynamics   Jun. 2019
Cetraro (CS), Italy

ESSAM on Mathematical Aspects of Fluid Flows   May 2019
Kácov, Czech Republic
Seminar talk: *Vanishing viscosity limit for the compressible Navier-Stokes system via measure-valued solutions*

Conference on Parabolic Evolution Equations, Harmonic Analysis and Spectral Theory   May 2019
Bad Herrenalb, Germany
Seminar talk: *Vanishing viscosity limit for the compressible Navier-Stokes system via measure-valued solutions*

Leipzig-Prague Joint Meeting   Dec. 2018
Oberwiesenthal, Germany
Seminar talk: *The weak-strong uniqueness principle for the Euler system with damping*

Berlin-Prague Workshop on PDE, stochastics and related problems   Dec. 2018
Berlin, Germany
Seminar talk: *The weak-strong uniqueness principle for the Euler system with damping*

Rencontres Franco-Tchèques de mathématiques   Nov. 2018
Lyon, France
Seminar talk: *The weak-strong uniqueness principle for the Euler system with damping*

Fall School on Hyperbolic Conservation Laws and Mathematical Fluid Dynamics   Oct. 2018
Würzburg, Germany

ESSAM on Mathematical Modelling, Numerical Analysis and Scientific Computing   May 2018
Kácov, Czech Republic

GRANTS, AWARDS AND SCHOLARSHIPS

Einstein Foundation scholarship Apr. 2018
Berlin, Germany

TEACHING EXPERIENCE

Private Lessons | *Mathematics and Physics* 2011 – 2018

Undergraduate Internship at High School | *Number of hours: 30* 2015
Liceo Scientifico G. B. Grassi Saronno (VA), Italy

SKILLS

Languages: Italian (Native), Serbian (C2), English (B2)
Programming: Matlab, C++
Software: LaTex