

David Hruška

Personal information

Home adress: Bzenecká 1034/8, Plzeň, 323 00, Czech Republic

Nationality: Czech

Date of birth: 6. 9. 1993

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Education

- 2019 – present doctoral student at Leipzig University; advisor: Prof. Dr. Jonas Hirsch
project title: *Regularity and properties of saddle points in a model for ferrofluid*
- 2016 – 2019 Master (Mgr.) in Mathematical Analysis, Charles University, Faculty of Mathematics and Physics; advisor: prof. RNDr. Josef Málek, CSc., DSc.
Master thesis: *Analysis of evolutionary problems with bounded gradients*¹
- 2013 – 2016 Bachelor (Bc.) in General Mathematics, Charles University, Faculty of Mathematics and Physics; advisor: prof. RNDr. Stanislav Hencl, Ph.D.
Bachelor thesis: *Typical continuous and integrable functions*²
- 2005 – 2013 Gymnázium, Mikulášské náměstí 23, Plzeň, 326 00

Publications

Hruška, D., *A note on directional Lipschitz continuity in the Euclidean plane*, Real Anal. Exchange 46, 2021.

Bulíček, M., Hruška, D. & Málek, J., *On evolutionary problems with a-priori bounded gradients*, Calc. Var. 62, 2023.

Conferences and workshops

- Geometric Analysis and PDEs*, summer school, Chęciny, July 2023; contributed research poster
- Surfaces22*: summer school, Fraueninsel, August–September 2022; contributed a short research talk
- Hausdorff School "Geometric Analysis and Nonlinear Partial Differential Equations"*: Bonn, August 2022; contributed research poster
- Mathematics for Mechanics*: Prague, October–November, 2019
- Hausdorff School "Modeling and Analysis of Evolutionary Problems in Material Science"*: Bonn, September 2019
- ESSAM: Mathematical Aspects of Fluid Flows*: Kácov, May 2019
- Winter School in Abstract Analysis*: Svatka, January 2019
- Harmonic Analysis, Spectral Theory and PDE's*: Rome, September 2017

Grants

*Argument Principle and Spectral Theorem*³, Student Faculty Grant awarded by Faculty of Mathematics and Physics, Charles University (with Josef Svoboda), 2016

Teaching

- Mathematics for physicists 2, TA*, Summer 2023, Uni Leipzig
- Mathematics for physicists 1, TA*, Winter 2022, Uni Leipzig
- Mathematical Physics, TA*, Winter 2021, Uni Leipzig
- Mathematical Physics, TA*, Winter 2020, Uni Leipzig
- Measure and Integral, TA*, Winter 2018, MFF UK
- Problem Solving Seminar*, Winter 2017 – Summer 2019, MFF UK

¹http://atrey.karlin.mff.cuni.cz/~hruskad/thesis_mgr.pdf

²http://atrey.karlin.mff.cuni.cz/~hruskad/thesis_bc.pdf

³http://atrey.karlin.mff.cuni.cz/~hruskad/SFG_vys1.pdf – in Czech

Internships and stays abroad

2018: *Erasmus Exchange Program: University of Pisa, Italy*: one semester stay

2017: *AwesomeMath Summer Program*⁴, *Cornell University, Ithaca, New York*: Teaching Assistant at two camps

2015: *ISTernship, IST Austria, Prof. László Erdős Group*: two-month stay as student researcher in the topic of *Random Matrices*⁵

⁴<https://www.awesomemath.org/summer-program/overview/program-information/>

⁵https://ist.ac.at/fileadmin/user_upload/events_pages/mathphys/projects/Trip_to_RM.pdf