

Personal Information

Date of Birth: 22 March 1985

Education

- Charles University in Prague, Faculty of Mathematics and Physics** Ph.D.
Study program Mathematics, branch Mathematical Analysis 2009 - 2013
Ph.D. thesis: Applications of descriptive set theory in mathematical analysis
- Charles University in Prague, Faculty of Mathematics and Physics** Mgr.
Graduated with distinction 2007 - 2009
- Charles University in Prague, Faculty of Mathematics and Physics** Bc.
Graduated with distinction 2004 - 2007

Professional Experience

- Institute of Mathematics of the Czech Academy of Sciences** Postdoc
Topology and Functional Analysis department 01/2014 - present
- Faculty of Informatics and Statistics, University of Economics, Prague** Associate professor
Department of Mathematics 09/2013 - 12/2013

Grants and Awards

- 2016** Grant 16-07378S: Nonlinear analysis in Banach spaces, Czech Science Foundation.
Role: team member.
- 2014 - 2015** Fellowship founded by the Czech Academy of Sciences:
Support Programme for the Perspective Human Resources.
The competition was open to all fields of science (not restricted to mathematics).
- 2010 - 2012** Grant 149410: Applications of descriptive set theory in mathematical analysis,
Charles University Grant Agency.
Role: leader.
- 2008 - 2009** The award of the Dean of the Faculty of Mathematics and Physics for the best master
thesis of the academic year.
- 2009** First place in the competition SVOČ (a competition of students from Czech and Slovak
universities in a scientific activity in mathematics).

Research Visits

University of Auckland 2016
Auckland, New Zealand

Lectures at Conferences

Winter School in Abstract Analysis 01/2016
Svatka, Czech Republic

Winter School in Abstract Analysis 01/2015
Svatka, Czech Republic

Interactions between Algebra and Functional Analysis 12/2014
Prague, Czech Republic

Joint Prague-Vienna Logic & Set Theory Meeting 10/2014
Prague, Czech Republic

Real Analysis Exchange Summer Symposium 06/2011
Budapest, Hungary

Week of doctoral students 06/2010
Prague, Czech Republic

Winter School in Abstract Analysis 01/2009
Kácov, Czech Republic

Winter School in Abstract Analysis 01/2008
Lhota nad Rohanovem, Czech Republic

Publications and Preprints

13. M. Doležal, J. Hladký, *Matching polytopes*, submitted.
12. M. Doležal, J. Hladký, P. Hu, D. Piguet, *First steps in combinatorial optimization on graphons: Matchings* (extended abstract), submitted.
11. M. Doležal, V. Vlasák, *Haar meager sets, their hulls, and relationship to compact sets*, to appear in J. Math. Anal. Appl.
10. M. Doležal, W. Kubiś, *Perfect independent sets with respect to infinitely many relations*, to appear in Arch. Math. Logic.
9. M. Doležal, J. Hladký, A. Máthé, *Cliques in dense inhomogenous random graphs*, to appear in Random Struct. Algorithms.
8. M. Doležal, D. Preiss, M. Zelený, *Infinite games and σ -porosity*, to appear in Israel J. Math.

7. M. Doležal, M. Rmoutil, B. Vejnar, V. Vlasák, *Haar meager sets revisited*, J. Math. Anal. Appl. 440 (2016), no. 2, 922–939.
6. M. Doležal, B. Vejnar, *Classification of the spaces $C_p^*(X)$ within the Borel-Wadge hierarchy for a projective space X* , Topology Appl. 183 (2015), 11–17.
5. M. Doležal, *Unitary representations of finite abelian groups realizable by an action*, Topology Appl. 164 (2014), 87–94.
4. M. Doležal, P. Ludvík, P. Pošta, P. Pyrih, M. Rmoutil, B. Vejnar, *Arcwise connected continuum with a free arc and with the fixed set property for monotone onto maps*, Questions Answers Gen. Topology 30 (2012), no. 2, 135–137.
3. M. Doležal, *Characterization of σ -porosity via an infinite game*, Fund. Math. 216 (2012), no. 2, 109–118.
2. M. Doležal, P. Pošta, P. Pyrih, M. Rmoutil, B. Vejnar, *Chain of dendrites without monotone supremum*, Questions Answers Gen. Topology 29 (2011), no. 2, 131–133.
1. M. Doležal, *A note on the three-segment problem*, Math. Bohem. 134 (2009), no. 2, 211–215.

Teaching Experience

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|---|-------------|
| Faculty of Informatics and Statistics, University of Economics, Prague | 2013 |
| <i>Exercise sessions in a basic course in calculus and linear algebra</i> | |
| Charles University in Prague, Faculty of Mathematics and Physics | 2009 - 2013 |
| <i>Exercise sessions in basic calculus courses</i> | |