Martin Doležal

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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).

Lectures at Conferences

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

Winter School in Abstract Analysis   01/2015
Svratka, 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 polytons*, 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*, submitted.

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*, submitted.

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

Faculty of Informatics and Statistics, University of Economics, Prague   2013
Exercise sessions in a basic course in calculus and linear algebra

Charles University in Prague, Faculty of Mathematics and Physics   2009 - 2013
Exercise sessions in basic calculus courses