

## 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 funded 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

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| <b>Winter School in Abstract Analysis</b><br><i>Svratka, Czech Republic</i>                  | 01/2016 |
| <b>Winter School in Abstract Analysis</b><br><i>Svratka, Czech Republic</i>                  | 01/2015 |
| <b>Interactions between Algebra and Functional Analysis</b><br><i>Prague, Czech Republic</i> | 12/2014 |
| <b>Joint Prague-Vienna Logic &amp; Set Theory Meeting</b><br><i>Prague, Czech Republic</i>   | 10/2014 |
| <b>Real Analysis Exchange Summer Symposium</b><br><i>Budapest, Hungary</i>                   | 06/2011 |
| <b>Week of doctoral students</b><br><i>Prague, Czech Republic</i>                            | 06/2010 |
| <b>Winter School in Abstract Analysis</b><br><i>Kácov, Czech Republic</i>                    | 01/2009 |
| <b>Winter School in Abstract Analysis</b><br><i>Lhota nad Rohanovem, Czech Republic</i>      | 01/2008 |

## Publications and Preprints

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*, submitted.
9. M. Doležal, J. Hladký, A. Máthé, *Cliques in dense inhomogenous random graphs*, submitted.
8. M. Doležal, D. Preiss, M. Zelený, *Infinite games and  $\sigma$ -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  $\sigma$ -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*