

Curriculum Vitae

RNDr. Michal Hrbek, Ph.D.

Date of birth: December 4, 1988, Prague, Czech Republic

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Professional experience

2017 - Post-doc, Institute of Mathematics, Czech Academy of Sciences

2012 - Teaching Assistant, Department of Algebra, Charles University

Practical classes: Algebra, Linear Algebra and Geometry, Number Theory and RSA, Representations of Finite-dimensional Algebras

Education

2013 - 2017 Ph.D., Faculty of Mathematics and Physics, Charles University

Thesis topic: Tilting theory of commutative rings; Advisor: Jan Trlifaj

2011 - 2013 MSc. (hons.), Faculty of Mathematics and Physics, Charles University

2008 - 2011 BSc., Faculty of Mathematics and Physics, Charles University

Awards

2013 Dean prize for the best master thesis in Mathematics, Faculty of Mathematics and Physics, Charles University

Research visits

02/2015 Research programme IRTATCA CRM in Barcelona

09/2015 Research visit in University of Verona, joint work with Lidia Angeleri Hügel.

Publications

1. M. HRBEK, P. RŮŽIČKA, Weakly based modules over Dedekind domains. *Journal of Algebra* 399 (2014): 251-268.
2. M. HRBEK, P. RŮŽIČKA, Characterization of Abelian groups with a minimal generating set. *Quaestiones Mathematicae* 38.1 (2015): 103-120.
3. M. HRBEK, One-tilting classes and modules over commutative rings. *Journal of Algebra* 462 (2016): 1-22.
4. L. ANGELERI HÜGEL, M. HRBEK, Silting modules over commutative rings. *International Mathematics Research Notices* (2016): rnw147, DOI: 10.1093/imrn/rnw147.
5. D. HERDEN, M. HRBEK, AND P. RŮŽIČKA, On the existence of weak bases for vector spaces. *Linear Algebra and its Applications* 501 (2016): 98-111.
6. M. HRBEK, P. RŮŽIČKA, Regularly weakly based modules over right perfect rings and Dedekind domains. *Czechoslovak Mathematical Journal* 67 (2017): 367-377.

Preprints

1. M. HRBEK, J. ŠŤOVÍČEK, Tilting classes over commutative rings. arXiv preprint arXiv:1701.05534 (2017), under review in *Compositio Mathematica*.

Conference talks

June 2012 *Modules with a minimal generating set*, AAA84, TU Dresden, Germany.

June 2014 *Some notes on Saorín's problem*, ASTA 2014, Spineto, Italy.

July 2015 *One dimensional tilting modules and classes over commutative rings*, Homological algebra in Kentucky, Lexington, USA.

April/May 2016 *Silting Modules over Commutative Rings*, Maurice Auslander Distinguished Lectures and International Conference, Woods Hole, USA.

August 2016 *n-tilting classes over commutative rings*, ICRA 2016, Syracuse, USA.

March 2017 *Local homology and n-tilting classes*, ECI Workshop, Brno, Czech Republic.

Grants

January 2014 - December 2016 Project no. 14-15479S: Representation theory (structural decompositions and their constraints), Czech Science Foundation, role: team member.

January 2017 - July 2017 Project no. 17-23112S: Structural representation theory of algebras (localization and tilting theory), Czech Science Foundation, role: team member.