Curriculum Vitae

Matija Bašić

Address

Molvička cesta 6
10430 Samobor
Croatia
Email: matija.basic@math.hr
Home page: web.math.pmf.unizg.hr/~mbasic

Personal Details

Gender: Male
Date of birth: August 21st, 1985
Place of birth: Zagreb, Croatia
Citizenship: Croatian

Education

10/2011-4/2015	Ph.D. student at the Radboud University in Nijmegen, supervisor Ieke Moerdijk Doctoral Thesis: *Stable homotopy theory of dendroidal sets* defence date: 23 April 2015
10/2008-10/2011	Ph.D. student at the University of Zagreb, supervisor Zoran Škoda
10/2004–10/2008	Graduated in Mathematics at the University of Zagreb, Department of Mathematics GPA: 5.0 Diploma Thesis: *Algebras in categories of chain complexes* (in Croatian) supervisor Zoran Škoda

Working Experience

Since 07/2015	Postdoc; University of Zagreb,
	Department of Mathematics, Faculty of Science
	Main responsibilities: scientific work, undergraduate teaching
10/2008 - 06/2015	Teaching / Research Assistant; University of Zagreb,
	Department of Mathematics, Faculty of Science
	Main responsibilities: scientific work, undergraduate teaching
10/2011 - 04/2015	PhD student of Radboud University in Nijmegen
Courses taught	Analysis of multivariable functions, Integrals of multivariable functions, Discrete mathematics, Combinatorics, Algebraic structures, Measure and integral, Mathematics (for biology students), Introduction to differential geometry, Elementary geometry, Competitions in Mathematics for students, Programming in C,

Research

Research interests	Abstract homotopy theory, dendroidal sets.
	Member of the project Homological methods in representation theory
	(since 2009, Pavle Pandžić, University of Zagreb)
	Member of Topology group Radboud
	(2011-2015, Ieke Moerdijk, http://www.math.ru.nl/topology/)
Articles	Dendroidal sets as models for connective spectra,
	with T. Nikolaus, 2014,
	Journal of K-theory: K-theory and its Applications to Algebra, Geometry, and Topology, doi:10.1017/is014005003jkt265
Preprints	Homology of dendroidal sets,
	with T. Nikolaus, arXiv: 1509.00702

Personal Skills and Competencies

Languages	Croatian: native
	English: active in writing and speaking
	German: passive in writing and speaking
Computer skills	Mathematica, LaTeX, C, MS Office

Awards

May 2008	Rector's award at the University of Zagreb for *Derivations of inner symmetric algebra and Weyl algebra in Loday-Pirashvili tensor category* (in Croatian)
April 2007	Dean's award at the Faculty of Natural Sciences and Mathematics, University of Zagreb
2000–2008	I was awarded a scholarship by the Town of Samobor during high school and university education.

Schools and conferences

September 2015	Higher Geometric Structures along the Lower Rhine, Utrecht
September 2015	Summer School on Category Theory and Algebraic Topology, Louvain-la-Neuve
July 2014	Young Topologists Meeting, Kopenhagen
September 2013	Summer School on Category Theory and Algebraic Topology, Louvain-la-Neuve
April 2012	Modern Perspectives in Homotopy theory, Swansea
January 2012	Higher Geometric Structures along the Lower Rhine, Bonn
February 2011	Workshop and School on Higher Gauge Theory, TQFT and Quantum Gravity, Lisbon
October 2010	Higher Structures in Mathematics and Physics, Wien
June 2010	CRCG Workshop - Higher Structures in Topology and Geometry IV, Goettingen
January 2010	Advanced School and Conference on Homological and Geometrical Methods in Representation Theory, Trieste
September 2009	Advanced School on Homotopy Theory and Algebraic Geometry, Seville
May 2009	Thematic School and Conference on Operads, Luminy
September 2007	Categories in Geometry and in Mathematical Physics, Split

Invited talks at workshops and conferences

September 2015	Stable homotopy theory of dendroidal sets, Higher geometric structures along the lower Rhine, Utrecht

Invited seminar talks

September 2015	Stable homotopy theory of dendroidal sets, Louvain-la-Neuve, Topology seminar
November 2014	Stable homotopy theory of dendroidal sets, Beograd, CGTA seminar
April 2014	Homology of dendroidal sets, Nijmegen, Topology seminar
August 2013	Homotopy theory of dendroidal sets, Regensburg
April-May 2013	a mini-series of seminars on model categories, simplicial sets, stable homotopy theory and dendroidal sets, Zagreb, Seminar for topology

Other seminar talks

June 2012	Homotopy theory of operads and applications to Physics, Zagreb
May 2012	Andre-Quillen homology, Nijmegen
April 2012	Dendroidal sets as a generalization of simplicial sets, Nijmegen
February 2011	Stone duality, Zagreb
February 2010	Representations of quivers, Zagreb
October 2009	Derived Morita theory, Zagreb
January 2009	Leibniz algebras and Loday - Pirashvili tensor category, Zagreb

Qualifying exams passed in Zagreb

October 2009	Geometry and Topology
December 2009	Algebra
June 2010	Probability theory

Advanced courses within the PhD program in Zagreb

ac. year 2008/09	Sheaves, bundles and cohomology - Lecturer Zoran Škoda
	Seminar talk (Winter 2010): Diaconescu's theorem internal to a topos
ac. year 2009/10	Homotopy in various categories - Lecturer Zoran Škoda
	Seminar talk (Spring 2011): Simplicial homotopy theory
ac. year 2009/10	Introduction to the theory of representations of locally compact groups - Lecturer Marcela Hanzer
	Seminar talk (September 2011): Pontryagin and Tannaka duality

ac. year 2010/11	Mathematical logic - Lecturer Mladen Vuković
	Seminar talk (September 2011): Topos theory in logic

Mathematical competitions

Since 2008	Member of the National Committee for Mathematical Competitions of High School Students
2015	Leader of the Croatian team at the IMO
2009, 2010, 2012	Deputy leader of the Croatian team at the IMO
2009	Leader of the team of University of Zagreb at Vojtech Jarnik and IMC
2005, 2006, 2008	Contestant at the IMC - one 2nd Prize and two 3rd Prize
2005-2008	Contestant at the Vojtech Jarnik
2004	Contestant at the IMO - Bronze Medal

Zagreb, October 1, 2015