Michał Adamaszek

PERSONAL
INFORMATION

Contact details:
e-mail: `michael.adamaszek@gmail.com`
web: `aszek.net`

EMPLOYMENT

Mosek ApS, Copenhagen, Denmark   **Dec 2016 − now**
Optimization specialist

University of Copenhagen, Denmark   **Dec 2014 − Aug 2016**
in **Experimental Math. in Number Theory, Operator Algebras and Topology**
Postdoctoral researcher in experimental mathematics in topology. Conducting research in combinatorics and topology; programming (C++, Python) and analysis of the gathered data; teaching; supervision.

Max Planck Institute for Informatics, Saarbrücken, Germany   **Feb 2014 − Nov 2014**
Postdoctoral researcher in algorithms and complexity. Research in computational topology, teaching.

Universität Bremen, Germany   **Oct 2012 − Jan 2014**
in the **Institute for Algebra, Geometry, Topology and their Applications**
Postdoctoral researcher in probabilistic methods in topology. Research in probabilistic and analytical methods in topology; programming; teaching.

Delta, University of Warsaw, Poland   **2007 − 2008**
Editor of the informatics section in the popular science monthly *Delta* of the University of Warsaw.

Wydawnictwa Naukowo–Techniczne, Warsaw, Poland   **2007**
Translator of *The Java Programming Language, 4th Edition, Ken Arnold, James Gosling, David Holmes* into Polish.

TLS-Technologie, Warsaw, Poland   **May − Aug 2005**
J2EE developer in a project for the billing department of a telecoms operator.

EDUCATION

University of Warwick, UK   **2008 − 2012**
in the **Centre for Discrete Mathematics and its Applications**

Ph.D. in Mathematics, 2012, *Some problems in combinatorial topology of flag complexes*
Advisors: Prof. John D.S. Jones, Prof. Artur Czumaj

University of Warsaw, Poland   **2001 − 2007**
M.Sc. in Mathematics, 2007, *Spaces of rational maps*, Advisor: Prof. Stefan Jackowski
M.Sc. in Computer Science, 2006, *On some properties of graceful graphs*
Advisor: Prof. Krzysztof Diks

V Liceum Ogólnokształcące w Bielsku-Białej, Bielsko-Biała, Poland   **1997 − 2001**

PUBLICATIONS

25 journal papers, 5 conference papers, a number of expository articles (full list available from my homepage).

STUDENTS	Christian Buchter (bachelor thesis) *Integer programming methods in graph coloring*, Copenhagen 2017
	Rasmus Nilsson (M.Sc. thesis, co-supervisor) *On the number of flat LEGO structures*, Copenhagen 2016
	Adrien Vakili (bachelor thesis) *Vietoris–Rips complexes of points sets in Euclidean space*, Copenhagen 2015
	Marten Rittweger (bachelor thesis, co-supervisor) *Topological methods in graph coloring*, Bremen 2013
GRANTS	Research in pairs, Mathematisches Forschungsinstitut Oberwolfach, Germany, 21 June – 4 July 2015, *Behaviour of geometric complexes as the scale increases*, with Henry Adams
TEACHING	(Copenhagen) Graph coloring (MPI Saarbrücken) Graduate seminar: Topological optimization problems (Bremen) Algebraic topology, Homological algebra (Warwick) Discrete mathematics and its applications I, II, Analysis III (Warsaw) Discrete mathematics I, II, Geometry and linear algebra, Introduction to operating systems and networks, Object-oriented programming
AWARDS	Best poster at the British Mathematical Colloquium, 18–21 April 2011, Leicester, UK
	Two best talk awards (Medal Filca) at Szkoła Matematyki Poglądowej.
MAJOR TALKS	*Euclidean Rips complexes*, Groups and combinatorics, Będlewo, April 2016
	K-Theory is algorithmically computable, Annual DMV Meeting, Hamburg, September 2015
	Random Rips dynamics on a circle, Annual DMV Meeting, Hamburg, September 2015
	Geometric complexes for subsets of the circle and beyond, Geometric and Algebraic Combinatorics, Oberwolfach, February 2015
	Graph-theoretic methods in combinatorial algebraic topology, EMS/DMF Joint Mathematical Weekend, Algebraic Topology session, Aarhus, April 2013
	Homology and complexity, Applied and computational topology: ATMCS 5, Edinburgh, July 2012
	Natural splittings of independence complexes, WATACBA: Workshop on Algebraic Topology and Combinatorics, Buenos Aires, November 2011
	The symmetric join operad, 78th Transpennine Topology Triangle, Leicester, April 2011
OUTREACH	In 2005–2013 I regularly gave invited lectures in *Szkoła Matematyki Poglądowej*, a cyclic event propagating mathematics and mathematical culture among Polish scientists, teachers and students. I used to give general audience talks and mentored in some events of the Polish Children's Fund and similar.
REVIEWER FOR	SODA; STOC; SoCG; Order; A&GT, Isr. J. Math., Homology, Homotopy and its Applications; Proc. Royal Soc., Electr. J. Comb.; J. Comb. Th. Series A; WG; Discrete Math.; Theoretical Comp. Sci.; MCAP; Mathematical Reviews
SKILLS	C/C++, Java, Python, C#, Julia, LaTeX, Sage, Linux, Bash, Git
	algorithms, convex optimization, data structures, algebra, combinatorics, probability, scientific writing, critical reviewing, teaching, public speaking
GOOD OLD DAYS	First Prize (44th place) at the Intermational Mathematics Competition, Odessa 2006 Central European Collegiate Programming Contest 2003, 10th place. Honorable mention at the 42nd International Mathematical Olympiad, USA 2001. Bronze medal at the 41st International Mathematical Olympiad, Korea 2000. Gold medal at the Baltic Olympiad in Informatics, Poland 2001 Five times finalist (1996,1998–2001) and twice 2nd degree award laureate (2000,2001) in the Mathematical Olympiad (Poland) 3rd degree award (2000) and 2nd degree award (2001) in the Informatics Olympiad (Poland)