

Sylwia Antoniuk

Curriculum Vitae

Adam Mickiewicz University
Department of Mathematics and Computer Science
Faculty of Discrete Mathematics
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Date of birth: January 14, 1986
Birthplace: Białystok, Poland
Citizenship: Polish

Education:

- 2010 – 2014 Adam Mickiewicz University, Poznań, Poland, PhD studies in Computer Science
Thesis title: Sharp threshold functions for some properties of random groups
Thesis advisor: Tomasz Łuczak
- 2005 – 2011 Jagiellonian University, Kraków, Poland, M.Sc. In Computer Science
Thesis title: Matrix partitions of graphs
Thesis advisor: Piotr Micek
- 2004 – 2010 Jagiellonian University, Kraków, Poland, M.Sc. In Mathematics
Thesis title: Lawson duality in Q-domains
Thesis advisor: Paweł Waszkiewicz

Research internship:

- 2014 – 2016 Postdoc in the Mathematical Institute of the Polish Academy of Sciences
- Spring 2014 Participant of the Graphs, Hypergraphs, and Computing Program in the Mittag-Leffler Institute
- Spring 2012 Young visiting researcher at the Warsaw University
Supervisor: Łukasz Kowalik

Grants, scholarships, awards:

- 2014 – 2016 National Science Center Grant PRELUDIUM
The evolution of random groups: sharp thresholds
- 2010 – 2014 National Scholarship for PhD Students in Mathematics and Computer Science (scholarship funded by EU)
- 2004 Finalist of the Polish National Mathematical Competition

Research interests:

- Random graphs, hypergraphs and probabilistic methods
- Random topology
- Random groups and simplicial complexes
- Combinatorial games

Publications:

- S. Antoniuk, T. Łuczak, P. Prytuła, P. Przytycki, *When a random triangular group is free?*, in preparation.
- S. Antoniuk, E. Friedgut, T. Łuczak, *A sharp threshold for collapse of the random triangular group*, Groups, Geometry and Dynamics, vol. 11, issue 3 (2017), p. 879-890.
- S. Antoniuk, C. Grosu, L. Narins, *On the connectivity Waiter-Client game*, arXiv:1510.05852, submitted.
- S. Antoniuk, T. Łuczak, J. Świątkowski, *Random triangular groups at density 1/3*, Compositio Mathematica, vol. 151, issue 1 (2015), p. 167-178.
- S. Antoniuk, T. Łuczak, J. Świątkowski, *Collapse of random triangular groups: a closer look*, Bull. Lond. Math. Soc., vol. 46, issue 4 (2014), p. 761-764.
- S. Antoniuk, P. Waszkiewicz, *A duality of generalized metric spaces*, Topology and Its Applications, vol. 158, issue 17 (2011-11), p. 2371-2381.

Selected talks:

- 08/2017 *When a random triangular group is free*
Random Structures and Algorithms Conference, Gniezno
- 11/2016 *Random triangular groups – a threshold for collapsing*
Probabilistic Methods in Topology, Montreal
- 07/2015 *Manipulative Waiter does not always win*
Novi Sad Foundations of Computer Science Conference, Novi Sad
- 11/2014 *When does the random group stop being free*
Between Combinatorics and Topology, Jerusalem
- 03/2014 *On the prompt collapse of the random triangular group*
Mittag-Leffler Institute, Sweden

Conferences and workshops organized:

- 08/2017 The 18th International Conference on Random Structures and Algorithms
- 04/2016 Combinatorics and Groups, Będlewo, Poland
- 04/2015 Kombinatoryka i Grupy, Będlewo, Poland

Teaching experience:

- Discrete Mathematics
- Combinatorics
- Probability Theory
- Calculus