Contact Information

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Personal Data

Date of Birth:	November 5, 1980.
Place of Birth:	Budapest, Hungary
Nationality:	Hungarian
Marital status:	married
Children:	no children

Education

1999–2005	MSc	Mathematics,	Budapest University of Technology
2005–2010	PhD	Mathematics,	Budapest University of Technology

PhD Dissertation Adviser: Prof. Bálint Tóth
PhD Dissertation Title:
Asymptotic behavior of random graphs evolving in time

Postdoc Job

From September 2010 to August 2012 I am a postdoc researcher working on random interlacements at ETH Zürich under the supervision of Prof. Alain-Sol Sznitman.

Recent Conferences and Workshops

- *2008, May:* Erwin Schrödinger Institute (Vienna, Austria): "Workshop on Combinatorics and Statistical Physics" (2 weeks)
- *2009, May:* Centre de Recherches Mathématiques (Montreal, Canada): "Workshop on New Directions in Random Spatial Processes" (1 week)
- *2009, September:* IRTG/Pro*Doc Berlin-Zürich Summer School on Probability (Chorin, Germany): "Stochastic Models of Complex Processes" (1 week)
- *2009, September:* University of Bath (Bath, United Kingdom): "Workshop on New Random Geometries" (1 week)
- *2010, July:* Clay Mathematics Institute (Buzios, Brazil): Summer School on Probability and Statistical Physics in Two and more Dimensions (4 weeks)
- *2010, December:* ESF-EURANDOM (Eindhoven, The Netherlands): Mathematics Conference on Combinatorics and Analysis in Spatial Probability (1 week)
- *2011, April:* University of Oxford (Oxford, United Kingdom): Workshop on Random Structures and Dynamics (1 week)
- *2011, June:* Florence, Italy: 4th La Pietra week in Probability at Finaly (1 week)
- *2012, March:* Toulouse Mathematics Institute (Toulouse, France): Workshop on Forest Fires (3 days)

Recent Conference and Seminar talks

- *2010, May:* Combinatorial Theory Seminar, University of Oxford
  http://www.maths.ox.ac.uk/node/12833
- *2010, July:* University of Sao Paulo, Probability Seminar
- *2011, March:* ETH Zürich, Seminar on Stochastic Processes
  http://www.math.ethz.ch/Finance/CoursesTalks/SSP
- *2011, April:* University of Oxford: Workshop on Random Structures and Dynamics
  https://www.maths.ox.ac.uk/content-13
- *2012, March:* University of Toulouse: Workshop on Forest Fires
  http://www.math.univ-toulouse.fr/ stahl/siteFF/schedule.html

Teaching Experience

- I was a teaching assistant at the Budapest University of Technology (BME) conducting problem solving sessions for engineer undergraduates for 8 semesters for the following courses: Calculus, Linear Algebra, Multivariate Calculus, ODE
- I was a teaching assistant conducting problem solving sessions for mathematics students of BME for the following courses: Probability I, Probability II, Stochastic processes
- At ETH I assist in the supervision of the BSc thesis of undergraduate students in mathematics and in the spring semester of 2012 jointly with Artem Sapozhnikov and Alexander Drewitz we give a graduate course on random interlacements.

Major areas of research interest

My research field is probability theory.

- The topic of my MSc thesis was the conformal invariance of critical percolation on the triangular lattice.
- Some of my research is related to notion of convergence of dense graph sequences: my main tool here is the connection between the theory of *graph limits* and that of exchangeable random arrays.
- The main topic of my PhD is self-organized criticality of the *mean field forest fire model*, a modification of the dynamical Erdős-Rényi random graph model where large components are destroyed. The model is related to the Smoluchowski coagulation equations and in the proofs we use methods from the theory of nonlinear PDE.
- My postdoc research topic at ETH is *random interlacements*, i.e. the investigation of the percolation properties of the set of sites not visited by a Poissonian soup of random walk trajectories on $\mathbb{Z}^d$ using renormalization techniques and discrete potential theory.

Spoken languages

- Cambridge Certificate in Advanced English
- Intermediate exam in French