

Konrad Kolesko

Curriculum Vitae

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Date of birth 16/12/1984

Nationality Polish

Education

Doctor of Philosophy

2008–2012 Ph.D. Studies

Institution Mathematical Institute, University of Wrocław

Thesis *Asymptotic behaviour of invariant measures of stochastic recursions*

Supervisor Professor Dariusz Buraczewski

Graduation date October 2012

Master of Science

2003–2008 Master Studies in Theoretical Mathematics

Institution Mathematical Institute, University of Wrocław

Thesis *Asymptotic properties of harmonic measures on homogeneous trees*

Supervisor Professor Dariusz Buraczewski

Scientific Interests

- Probability Theory, Iterated random functions, Branching processes, Random Walk in Random Environment
- Harmonic Analysis
- Functional Analysis

Work experience

10/2013 – 09/2014 **Post-doctoral fellows**

Institution Institute of Mathematics, University of Warsaw

post-doctoral position at Warsaw Center of Mathematics and Computer Science

mentor: Rafał Łatała

10/2012 – Present **Research assistant**

Institution Mathematical Institute, University of Wrocław

- Main activities
- Research on Branching processes
 - Lectures on Measure theory
 - Exercise classes in Calculus, Combinatorics and Probability Theory

10/2008 – 9/2012 **Research assistant**

Institution Mathematical Institute, University of Wrocław

Main activities - Research related to my PhD
- Teaching students

Conferences/Schools/Workshops

- 2015 **Random walks on graphs and potential theory**, Warwick, UK.
- 2015 **Conference in Memory of Marc Yor**, Paris, France.
- 2015 **Probability and Analysis**, Będlewo, Poland.
- 2014 **The third Bath-Paris Branching Structures:**, Bath, UK.
- 2014 **Probabilistic Aspects of Harmonic Analysis**, Będlewo, Poland.
- 2013 **Random Walks: Crossroads and Perspectives**, Budapest, Hungary.
- 2013 **First German-Polish Joint Conference on Probability and Mathematical Statistics**, Toruń, Poland.
- 2012 **8th Cornell Probability Summer School**, Ithaca, USA.
- 2012 **Focussed meeting: the shape of branching random walk and related topics**, Graz, Austria.
- 2012 **Probabilistic Aspect of Harmonic Analysis**, Będlewo, Poland.
- 2011 **Random Matrices and Iterated Random Functions**, Münster, Germany.
- 2011 **Analysis and Applications: A Conference in Honor of Elias M. Stein**, Princeton, USA.
- 2011 **Spring School**, Graz, Austria.
- 2010 **Summer Course in Mathematics**, Cortona, Italy.
- 2010 **40th Probability Summer School**, Saint-Flour, France.
- 2010 **Analysis, Geometry and Probability Related to Group Actions**, Zakopane, Poland.
- 2009 **Workshop on *boundaries***, Graz, Austria.
- 2009 **Probability and Geometry on Groups**, Orsay, France.
- 2008 **11th Workshop: Non-Commutative Harmonic Analysis with Applications to Probability**, Będlewo, Poland.
- 2008 **Harmonic Analysis and Group Actions in Analysis**, Zakopane, Poland.

Talks

- 2015 *Local fluctuations of critical Mandelbrot cascades*, Warwick, UK
- 2015 *Local fluctuations of critical Mandelbrot cascades*, Będlewo, Poland
- 2013 *Linear stochastic equations in the critical case*, Toruń, Poland
- 2012 *Inhomogeneous smoothing transform in the critical case*, Graz, Austria
- 2012 *Inhomogeneous smoothing transform in the critical case*, Będlewo, Poland
- 2011 *Tails of solutions of inhomogeneous smoothing transform*, Graz, Austria

- 2010 *On multidimensional affine recursions in a critical case*, Graz, Austria
- 2010 *On multidimensional affine recursions in a critical case*, Zakopane, Poland
- 2008 *Asymptotic behaviour of Poisson measures for affine groups of homogeneous trees*, Zakopane, Poland

Scientific visits

- 11/05 – 10/06/2015 Université Paris 13 (Yueyun Hu)
- 01/07 – 20/07/2013 Technische Universität München (Nina Gantert)
- 01/10 – 20/12/2010 Graz University of Technology (Wolfgang Woess)

Publications/Preprints

- D. Buraczewski, P. Dyszewski, K. Kolesko**, *Local fluctuations of critical Mandelbrot cascades*, preprint.
- 2015 **K. Kolesko, R. Latała**, *Moment estimates for chaos generated by symmetric random variables with logarithmically convex tails*, Statistics and Probability Letters.
- 2015 **K. Kolesko, S. Mentemeier**, *Fixed points of the multivariate smoothing transform: the critical case*, Electronic Journal of Probability.
- 2014 **D. Buraczewski, K. Kolesko**, *Linear stochastic equations in the critical case*, Journal of Difference Equations and Applications.
- 2013 **A. Georgakopoulos, K. Kolesko**, *Brownian Motion on graph-like spaces*, preprint.
- 2012 **K. Kolesko**, *On multidimensional affine recursions in a critical case*, Probability Theory and Related Fields.
- 2012 **D. Buraczewski, K. Kolesko**, *Random walks on the affine group of a homogeneous tree in the drift-free case*, Journal of Theoretical Probability.
- 2010 **K. Kolesko**, *Asymptotic properties of harmonic measures on homogeneous trees*, Colloquium Mathematicum.

Grants

- 2015 – Present Participating in research grant: Sonata Bis DEC-2014/14/E/ST1/00588
- 2013 – Present Participating in research grant: NCN grant DEC-2012/05/B/ST1/00692
- 2011 – 2012 Research grant for PhD students: MNiSW grant N N201 610740
- 2009 – 2012 Participating in research grant: MNiSW N 201 393937

Awards

- 2008 3rd prize in the competition for the best student work in probability theory and applied mathematics organised by Polish Mathematical Society
- 2000 – 2001 Prime Minister's Fellowship

Languages

English **Fluent**