Warwick Mathematics Institute

Random walks on graphs and potential theory

18-22 May 2015

Organisers: Agelos Georgakopoulos, David Croydon

PROGRAMME

Monday 18 May Lectures in Room MS.03

8:30	Registration in Room B1.37	
11:00-11:30	Coffee in the Mathematics Institute Common Room	
11:30-12:30	**Omer Angel** (UBC)	*A dichotomy for unimodular maps*
12:30-14:00	Lunch in the Mathematics Institute Common Room	
14:00-15:00	**Johannes Carmesin** (Hamburg/Cambridge)	*Every planar graph with the Liouville property is amenable*
15:00-15:20	Tea in the Mathematics Institute Common Room	
15:20-16:20	**Perla Sousi** (Cambridge)	*Mixing, hitting and intersection times for Markov chains*
16:30-17:30	**Ronen Eldan** (Washington)	*Braess's paradox for the spectral gap in random graphs and delocalization of Eigenvectors*
17:40-18:10	**John Sylvester** (Warwick)	*Hitting times and effective resistances in sparsely connected Erdős–Rényi random graphs*
18:30	Dinner in the Mathematics Institute Common Room	

Tuesday 19 May Lectures in Room MS.03

10:00-11:00	**Stephan Wagner** (Stellenbosch)	*Loop models on a fractal*
11:00-11:30	Coffee in the Mathematics Institute Common Room	
11:30-12:30	**Anita Winter** (Duisberg-Essen)	*Invariance principle for variable speed random walks on trees*
12:30-14:00	Lunch in the Mathematics Institute Common Room	
14:00-14:30	**Konrad Kolesko** (Wroclaw)	*Almost sure pointwise fluctuations of critical Mandelbrot cascades*
14:30-15:00	**Vladislav Vysotskiy** (Imperial College London/Arizona State/St. Petersburg Division of Steklov Institute)	*On hitting times of bounded sets by random walks*
15:00-15:20	Tea in the Mathematics Institute Common Room	
15:20-16:20	**Alex Zhai** (Stanford)	*Exponential concentration of cover times*
16:30-17:30	Open Problem Session	
18:30	Dinner in the Mathematics Institute Common Room	

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PROGRAMME cont.

Wednesday 20 May Lectures in Room MS.05

10:00-11:00	**Márton Balázs** (Bristol)	*Electric network for non-reversible Markov chains*
11:00-11:30	Coffee in the Mathematics Institute Common Room	
11:30-12:30	**Ori Gurel-Gurevich** (Hebrew University, Jerusalem)	*Boundaries of planar graphs*
12:30-14:00	Lunch in the Mathematics Institute Common Room	
13:30	Midlands Probability Seminar	

Thursday 21 May Lectures in Room MS.05

10:00-11:00	**Vadim Kaimanovich** (Ottawa)	*Stopping times and Poisson boundaries*
11:00-11:30	Coffee in the Mathematics Institute Common Room	
11:30-12:30	**Alessandro Sisto** (ETH)	*Central limit theorem for acylindrically hyperbolic groups*
12:30-14:00	Lunch in the Mathematics Institute Common Room	
14:00-15:00	**Antoine Gournay** (Neuchatel)	*The reduced ℓ^p -cohomology in degree 1 and harmonic functions*
15:00-15:20	Tea in the Mathematics Institute Common Room	
15:20-16:20	**Wolfgang Woess** (TU Graz)	*Quasi-isometries of graphs and groups, random walks, and harmonic functions*
16:30-17:30	**Daniel Lenz** (Jena)	*Uniformly transient graphs*
18:30	Dinner in the Mathematics Institute Common Room	

Friday 22 May Lectures in Room MS.05

10:00-11:00	**Thomas Sauerwald** (Cambridge)	*Multiple Random Walks: Cover Times, Hitting Times and Applications*
11:00-11:30	Coffee in the Mathematics Institute Common Room	
11:30-12:30	**Ben Hambly** (Oxford)	*Asymptotics for spectra and heat kernels for some random fractals*
12:30-14:00	Lunch in the Mathematics Institute Common Room	
14:00-15:00	**Peter Morters** (Bath)	*Robustness of spatial preferential attachment networks*
15:00-15:20	Tea in the Mathematics Institute Common Room	