BMS Summer School 2011

Random Motions and Random Graphs

Week Two

(22 September)

	Tuesday, Oct. 04	**Wednesday, Oct. 05**	**Thursday, Oct. 06**	**Friday, Oct. 07**
09:30–11:00	van der Hofstad	Chauvin	van der Hofstad	Chauvin
	c o f f e e b r e a k			
11:30–13:00	Chauvin	van der Hofstad	Chauvin	van der Hofstad
	l u n c h b r e a k			
14:30–16:00	Fitzner	Mailler	Fitzner	Mailler
	c o f f e e b r e a k			
16:30–17:30	Rœlly	König	Kupper	Djurdjevac Weller Benard
17:30–18:30	Hein Bartsch/M. Kochler Ruszel	Munsonius Lenz Marko	Temmel Torres Kiss	Imran Khosla Mönch

All talks take place in Lecture Hall MA041 (Math Building) on Tuesday till Thursday, and in Lecture Hall H0110 (Main Building) on Friday.

Lectures and exercises

Brigitte Chauvin and **Cécile Mailler:**
Random trees for analysis of algorithms

Remco van der Hofstad and **Robert Fitzner:**
Stochastic processes on random graphs: routing and attack vulnerability

Survey Talks

Sylvie Rœlly (Universität Potsdam):
Characterization of some processes (Wiener, Poisson, Gibbs,...) by duality formulae

Wolfgang König (Weierstraß-Institut and Technische Universität Berlin):
Connectivity problems in telecommunication

Michael Kupper (Humboldt Universität Berlin):
Minimal Supersolutions of BSDEs

Contributed Talks

Hein:
Ergodicity of the two-dimensional Navier-Stokes equations with Lévy forcing

Bartsch/M. Kochler:
Survival and growth of a branching random walk in random environment

Ruszel:
Sandpile models on random graphs

Munsonius:
Recurrences of random variables arising in random trees or recursive algorithms

Lenz:
Network reliability, combinatorics, and some inequalities

Marko:
Invariant allocations to Poisson points

Temmel:
k-independent percolation on trees

Torres:
Gap-alignment model for random sequences

Kiss:
A percolation process on the binary tree where large finite clusters are frozen

Djurdjevac:
Multiscale random walks on modular networks

Weller:
Random planar graph processes

Benard:
A comprehensive study of macroscopic structures of a random graph and its formation process using tools of stochastic processes

Imran:
Metric dimension and R-sets of connected graphs

Khosla:
Orientability of random hypergraphs

Mönch:
Average distances in preferential attachment models