BMS Summer School 2011

Random Motions and Random Graphs

Week One

(22 September)

	Tuesday, Sep. 27	**Wednesday, Sep. 28**	**Thursday, Sep. 29**	**Friday, Sep. 30**	**Saturday, Oct. 01**
09:30–11:00	Gantert	Mörters	Gantert	Mörters	Gantert
	c o f f e e b r e a k				
11:30–13:00	Mörters	Gantert	Mörters	Gantert	Mörters
	l u n c h b r e a k				
14:30–16:00	Nagel	Cammarota	Nagel	Cammarota	
	c o f f e e b r e a k				
16:30–17:30	Reiß	Scheutzow	Imkeller	Fitzner Goodman Maillard	
17:30–18:30	**Reception**	Erhard Völlering Keller	Cleophas Santos Heydenreich	Laurent Ralchenko	

All talks take place in Lecture Hall MA041.

Lectures and exercises

Nina Gantert and **Jan Nagel:**
Random walks, random media, branching

Peter Mörters and **Valentina Cammarota:**
Path properties of Brownian motion

Survey Talks

Markus Reiß (Humboldt Universität Berlin):
Statistics for Lévy processes

Michael Scheutzow (Technische Universität Berlin):
How quickly does an oil spill spread? An application of chaining to stochastic flows

Peter Imkeller (Humboldt Universität Berlin):
Modeling of paleo-climatic time series and meta-stability of dynamical systems

Contributed Talks

Erhard:
parabolic Anderson model in a dynamic random environment

Völlering:
Random walks in a dynamic random environment

Keller:
Absolutely continuous spectrum of multi-type Galton-Watson trees

Cleophas:
The fundamental properties of random motions in random environment using the tools of integration theory

Santos:
Mixing conditions and generation for non-elliptic random walk in dynamic random environment

Heydenreich:
Random walk on critical percolation clusters

Fitzner:
Matrix bases approach to analyze the non-backtracking walk

Goodman:
The "strong disorder" limit for first passage percolation on the complete graph

Maillard:
Branching Brownian motion with selection

Laurent:
Large deviations for self-intersections local time

Ralchenko:
Path properties and absolute continuous approximations for multifractal BM