ZiF
Zentrum für interdisziplinäre Forschung
Center for Interdisciplinary Research
Universität Bielefeld

EUROPEAN SCIENCE FOUNDATION

Stochastic Dynamics in Mathematics, Physics and Engineering

November 2 - 4, 2011

Convenors: Prof. Dr. Barbara Gentz (Bielefeld), Prof. Dr. Max-Olivier Hongler (Lausanne), and Prof. Dr. Peter Reimann (Bielefeld)

PROGRAM

Wednesday - November 2, 2011

09:00-09:15	*Welcome Address*
09:15-10:00	N. Berglund: Does noise create or suppress mixed-mode oscillations?
10:00-10:45	B. Lindner: Stochastic problems in neuroscience
10:45-11:15	- *coffee break* -
11:15-12:00	B. Cessac: Statistics of action potentials in neural networks: from experiments to mathematics
12:00- 12:45	F. Naef: Stochastic switches underlying transcriptional bursting in mammalian cells
12:45-14:30	- *lunch* -
14:30-15:15	M. Kastner: Long-range ferromagnets: exact results and probabilistic description
15:15- 16:00	H. Weber: Invariant measure for the Allen-Cahn equation on large domains
16:00-16:30	- *coffee break* -
16:30-17:15	D. Blömker: Front motion in the one-dimensional stochastic Cahn-Hillard equation

Thursday - November 3, 2011

09:00-09:45	T. D. Frank: Nonlinear Markov processes and agent-based modelling
09:45-10:30	F. Colonius: Supports of conditionally invariant measures for random diffeomrophisms (tentative)
10:30-11:00	- *coffee break* -
11:00-11:45	V. Betz: Spatial random permutations and Bose-Einstein condensation
11:45-12:30	D. Armbruster: Modeling queuing networks as dynamical systems
12:30-14:30	- *lunch* -
14:30-15:15	J. P. Gleeson: Stochastic dynamics on Complex Networks
15:15-16:00	A. Engel: Asymptotics of work distributions in non-equilibrium systems
16:00-16:30	- *coffee break* -
16:30-17:15	K. Kroy: Hot Brownian motion
19:00	- *conference dinner at restaurant "Wernings Weinstube", Alter Markt 1* -

Friday - November 4, 2011

09:00-09:45	T. Hasegawa: Percolation on complex networks and nonamenable graphs
09:45-10:30	N. Janson: Learning with "memory foam" approach
10:30-11:00	- *coffee break* -
11:00-11:45	W. Just: Stick-slip transition in a model with dry friction
11:45-12:30	P. Gaspard: Time-reversal symmetry relations for nonequilibrium stochastic processes
12:30-14:00	- *snack* -

Departure