Stochastic Analysis and Applications
German–Japanese bilateral research project, 2012–2013

Organizers:
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Masayoshi Takeda (Tohoku Univ.)

Local organizers: Hiroshi Kawabi (Okayama Univ.), Yuichi Shiozawa (Okayama Univ.)

Date: Sep. 24–Sep. 28, 2012
Place: Okayama University, Tsushima East Campus, Building for General Education A, Room A41

Program

Sep. 24 (Mon.)

10:20–11:10  Jean-Dominique Deuschel (TU Berlin)
Marginal density expansions for diffusions and stochastic volatility

11:25–12:15  Shigeki Aida (Tohoku University)
Tunneling for spatially cut-off $P(\phi)_2$-Hamiltonians

14:00–14:50  Stefan Adams (The University of Warwick)
Random field of gradients

15:10–16:00  Takao Nishikawa (Nihon University)
Hydrodynamic limit for the Ginzburg-Landau $\nabla \phi$ interface model with both a conservation law and the Dirichlet boundary condition

16:20–17:10  Seiichiro Kusuoka (Kyoto University)
Exponential convergence of Markovian semigroups and their spectra on $L^p$-spaces

Sep. 25 (Tue.)

9:20–10:10  Noriyoshi Sakuma (Aichi University of Education)
On the law of free subordinators

10:25–11:15  Moritz Kassmann (Bielefeld University)
Regularity theory for parabolic nonlocal operators

11:30–12:20  Matthias Keller (University of Jena)
Essential spectra and volume growth of regular Dirichlet forms

14:00–14:50  Hirofumi Osada (Kyushu University)
Infinitely dimensional stochastic equations related to Airy random point fields

15:10–16:00  Xueping Huang (Bielefeld University)
Stochastic completeness of jump processes and random walks

16:20–17:10  Masaki Wada (Tohoku University)
Perturbation of Dirichlet forms and stability of fundamental solutions
Sep. 26 (Wed.)

9:20–10:10 Harald Oberhauser (TU Berlin)
Free boundary problems, viscosity solutions and applications in finance

10:25–11:15 Masatoshi Fukushima (Osaka University)
Brownian motion with darning applied to KL and BF equations for planar slit domains

11:30–12:00 Yu Ito (Kyoto University)
Integrals along rough paths via fractional calculus

Sep. 27 (Thu.)

9:20–10:10 Ryoki Fukushima (Kyoto University)
Annealed Brownian motion in a heavy tailed Poissonian potentials

10:25–11:15 Kazumasa Kuwada (Ochanomizu University)
Wasserstein contractions associated with the curvature-dimension condition

11:30–12:20 Marcel Schmidt (University of Jena)
Global properties of Dirichlet forms in terms of Green’s formula

14:00–14:50 Tomoko Takemura (Nara Women’s University)
Lévy measure density corresponding to inverse local time

15:10–16:00 Michael Röckner (Bielefeld University)
Stochastic variational inequalities and applications to the total variation flow perturbed by linear multiplicative noise

16:20–17:10 Kazuhiro Kuwae (Kumamoto University)
On spectral bounds for symmetric Markov chains with coarse Ricci curvatures

Sep. 28 (Fri.)

9:20–10:10 Masanori Hino (Kyoto University)
Geodesic distances and intrinsic distances on some fractal sets

10:25–11:15 Wei Liu (Bielefeld University)
Well-posedness of SPDE with local monotonicity and generalized coercivity conditions

11:30–12:20 Makoto Nakashima (University of Tsukuba)
Super-Brownian motion in random environment and heat equation with noise

14:00–14:50 Takashi Kumagai (Kyoto University)
Quenched invariance principle for random walks and random divergence forms in random media on cones

15:05–15:55 René L. Schilling (TU Dresden)
Some path properties of Lévy-type processes

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