Second Sino-German Meeting on Stochastic Analysis

March 19--March 23, 2007

Program

Organizers

S. Albeverio, Universität Bonn

Z.M. Ma, Academy of Mathematics and Systems Science, CAS

M. Röckner, Universität Bielefeld

Sponsors

Sino-German Center for Research Promotion

Academy of Mathematics and Systems Science, CAS

Deutsche Forschungsgemeinschaft, Germany

Venue

Academy of Mathematics and Systems Science, CAS

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(北京市,中关村东路 55 号，数学与系统科学研究院)

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March 19, 2007, Plenary Talks

Morning (Chairperson, M. Roeckner, Siyuan Building, Conference Hall)

8:30------9:00 Opening ceremony

9:00------9:40 Shige Peng, *G-Brownian motion, central limit theorem under sublinear expectations and risk measures*

9:40----10:00 Tea break

10:00---10:40 F. Götze, *Asymptotic distribution of random spectra*

10:40---11:20 H. Dawid, *Implementation by stochastic stability in a hold-up problem with two-sided investment*

Noon 11:30----13:00 Lunch

Afternoon (Chairperson, Ph. Blanchard, Siyuan Building, Conference Hall)

14:00---14:40 Zhiming Ma, *Nonlinear filtering of semi-Dirichlet processes*

14:40---15:20 R. Schilling, *Stochastic processes and the dimension of their paths*

15:20---15:40 Tea break

15:40---16:20 Yongjin Wang, *From discrete Markov jump systems to two species competitive stochastic Lotka-Volterra equations*

16:20---17:00 A. Eberle, *Convergence of sequential Markov chain Monte Carlo methods*

17:00---17:40 Zengjing Chen, *Nonlinear expecation, nonlinear pricing and interest rate model*

18:00---19:30 Dinner

March 20, 2007, Plenary Talks

Morning (Chairperson, Shige Peng, Siyuan Building, Conference Hall)

8:20------9:00 Ph. Blanchard, *Complex networks: random graph models, function, structure and dynamics*

9:00------9:40 Fengyu Wang, *Orlicz-Poincare inequalities and applications*

9:40----10:00 Tea break

10:00---10:40 L. Streit, *Spectral analysis of Laplaceans on graphs- the case of R&D networks in the EU framework programmes*

10:40---11:20 Shanjian Tang, *Stochastic differential games in finance*

Noon 11:30-----13:00 Lunch

Afternoon (Chairperson, Dayue Chen, Siyuan Building, Conference Hall)

14:00---14:40 Wenbo V. Li, *Spectral analysis of Brownian motion with jump boundary*

14:40---15:20 G. Trutnau, *About the skew Bessel process on a curve*

15:20---15:40 Tea break

15:40---16:20 Zenghu Li, *Continuous state branching processes and stochastic equations with jumps*

16:20---17:00 W. Hoh, *Some properties of solutions to the martingale problem for a class of pseudo differential operators*

17:00---17:40 Quansheng Liu, *A branching random walk on Z in random environment*

18:00---19:30 Dinner

March 21, 2007, Tour

March 22, 2007， Plenary Talks

Morning (Chairperson, Fengyu Wang, Siyuan Building, Conference Hall)

8:20------9:00 Mufa Chen, *Spectral gap of continuous spin systems*

9:00------9:40 Yu. G. Kondratiev, *Spatial Markov processes in mutation-selection models*

9:40----10:00 Tea break

10:00---10:40 Jiaan Yan, *New risk measures based on Choquet integrals*

10:40---11:20 F. Riedel, *Optimal stopping under ambiguity*

Noon 11:30---13:00 Lunch

Afternoon (Chairperson, R. Schilling, Siyuan Building, Conference Hall)

14:00---14:40 M. Grothaus, *Langevin dynamics in continuous particle systems*

14:40---15:20 Dayue Chen, *Random walks in a random cluster*

15:20---15:40 Tea break

15:40---16:20 W. Stannat, *Particle filters and the Kushner-Stratonovich equation*

16:20---17:00 Liming Wu, *Transportation-entropy-information inequalities*

17:00---17:40 Fuzhou Gong, *Stability of random network*

18:00---19:30 **Banquet**

March 23, 2007, Session Talks （2 sessions in parallel）

Session 1

Morning (Chairperson, Zhao Dong, Room 712, Siyuan Building)

8:00-----8:20 Xiangqun Yang, *Unified characteristic numbers and solutions of equations for birth and death processes with barriers*

8:20-----8:40 Sven Struckmeier, *Stochastic processes in random environment*

8:40-----9:00 Mingyu, Xu, *Reflected BSDE with a constraint and a new Doob-Meyer nonlinear decomposition (with Shige Peng)*

9:00-----9:20 Zhonggeng Su, *Gaussian fluctuations of Young diagrams under the Plancherel measure*

9:20-----9:40 Caisi Wang , *Composition of Dirac delta function with an observable*

9:40----10:00 Tea break

10:00---10:20 Bo Zhang, *Martingale characterization of G-Brownian motion*

10:20---10:40 Nataliya Ohlerich, *Spectral gap for Glauber dynamics of continuous particle systems*

10:40---11:00 Yingqiu Li, *Age-dependent branching processes in random environment (with Quansheng Liu)*

11:00---11:20 Weiying Fei, *On existence and uniqueness of solution to SDDEs for fractional Brownian motion*

11:20---11:40 Yingchao Xie, *Uniqueness of solutions of measure-valued equations of nonlinear filtering with jumps*

11:40---12:00 Shao-Ming Fei， *Bell inequalities classifying quantum entanglement*

Noon 12:00-----13:20 Lunch

Afternoon (Chairperson, Zenghu Li, Room 712, Siyuan Building)

13:40---14:00 Frederik Herzberg, *The jump part of a Levy process as a hyperfinite superposition of Poisson processes*

14:00---14:20 Fubao Xi, *Exponential ergodicity of diffusion processes with state-dependent switching*

14:20---14:40 Chuanzhong Chen, *Girsanov transformations for non-symmetric diffusions*

14:40---15:00 Xianping Guo, *Continuous-time Markov decision processes with constraints*

15:00---15:20 Shoumei Li, *Large and moderate deviations of random upper semicontinuous functions (with Yuki Ogura, Xia Wang)*

15:20---15:40 Tea break

15:40---16:00 Wei Wang, *Reductions and deviations for stochastic partial differential* *equations under fast dynamical boundary conditions*

16:00---16:20 Jianzhong Lin, *A general stochastic maximum principle for optimal control of Levy-driven stochastic systems*

16:20---16:40 Dejun Luo, *Regularity of solutions to differential equations with non-Lipschitz coefficients*

16:40---17:00 Jiaowan Luo, *Fixed points and stability of stochastic partial differential equations with delay*

17:00---17:20 Zhe Yang, *Anticipated BSDE*

17:20---17:40 Jinxiao Zhang, *Flows associated to adapted vector fields on Wiener spaces*

18:00---19:30 Dinner

Session 2

Morning (Chairperson, Yingqiu Li, Room 703, Siyuan Building)

8:00-----8:20 Felipe Torres Tapia, *Searching typical block types in the longest common subsequence configuration*

8:20-----8:40 Zhongxin Ye, *Change of filtrations and mean-variance hedging*

8:40-----9:00 Chunrong Feng, *Variation of local time and new extensions to ito's formula*

9:00-----9:20 Oleksandr Kutoviy, *Diffusion approximation for equilibrium Kawasaki dynamics in Continuum*

9:20-----9:40 Zhiyong Yu, *Nash equilibrium point for one kind of stochastic nonzero-sum game problem and BSDEs*

9:40----10:00 Tea break

10:00---10:20 Lifeng Chen, *Looking for the g-pricing mechanism of financial market*

10:20---10:40 Yuhong Li, *Asymptotic behaviour analysis of stochastic Bernard problem on unbounded domains*

10:40---11:00 Qing Zhou, *Power utility maximization in an exponential Levy model without a Risk-free asset*

11:00---11:20 Li Wei, *Empirical analysis on the technology spillover effect of foreign direct investments: a case study on China (Yonghong Tu)*

11:20---11:40 Sven Wiesinger, *A pathwise approach to noise-induced synchronization in an asymmetric double-well potential*

11:40---12:00 Feng Yu, *t.b.a.*

Noon 12:00-----13:20 Lunch

Afternoon (Chairperson, Zhonggen Su, Room 703, Siyuan Building)

13:40---14:00 Xinsheng Zhang, *Parametric estimation of discretely sampled Gamma-OU processes*

14:00---14:20 Jonas M. Toelle, *Variational convergence of non-symmetric operators and forms along a sequence of Hilbert spaces*

14:20---14:40 Jian Wang, *Some functional inequalities for general symmetric Levy type operator*

14:40---15:00 Guangchen Wang, *Kalman-Bucy filtering equations of the forward and backward stochastic systems and applications to the recursive optimal control problem*

15:00---15:20 Hao Ge, *Generalized Jarzynski's equality in inhomogeneous Markov chains (with Mina Qian)*

15:20---15:40 Tea break

15:40---16:00 Xianming Geng, *Some scale-free properity deduced by the method of probability in the complex networks*

16:00---16:20 Long Jiang, *Convex risk measures via g-expectations*

16:20---16:40 Zhiyong Wang, *Stochastic time-delay systems and their stability of the Milstein system (with Chengjian Zhang)*

16:40---17:00 Wei Gu, *A layer method of solving the Cauchy problem for quasi-linear parabolic problems (with Chengjian Zhang)*

17:00---17:20 Weidong Zhao, *High accurate numerical method for BSDEs*

17:20---17:40 Wei Liu, *Harnack inequality and applications for monotonic stochastic evolution equations*

18:00---19:30 Dinner

Closing