# Program

### Chinese-German Meeting on Stochastic Analysis and Related Fields

#### May 3-7, 2010, Beijing

55 Zhongguancun East Road, Academy of Mathematics and Systems Science

(中关村东路55号, 数学与系统科学研究院)

#### Organizers: Zhi-Ming Ma, Michael Röckner

May 3 (Mo	onday), Co	nference Hall, Siyuan Building		
07:00-08:30	Breakfast			
07:30-08:30	Registration			
08:30-09:00	Opening Ceremon	ny (Chairpersons, Zhi-Ming Ma, Michael Röckner)		
Morning	Chairperson, Jiaan	n Yan		
09:00-09:40	Qi-Man Shao	Self-normalized Limit Theory and Stein's Method		
09:40-10:20	Jean-Dominique	Markov Chain Approximations to Non-symmetric Diffusions		
	Deuschel	with Bounded Coefficients		
10:20-10:35	Tea break			
10:35-11:15	Liming Wu	Continuous Gas: from Malliavin to Gibbs		
11:15-11:55	Robert Schrader	Brownian Motion on Metric Graphs		
Noon	Lunch (Wuke Ho	tel, 物科宾馆)		
11:55-13:25				
Afternoon	Chairperson, Ludwig Streit			
13:25-14:05	Shanjian Tang	Backward Doubly Stochastic Partial Differential Equations		
14:05-14:45	Martin Grothaus	An Invariance Principle for a Tagged Particle Process in		
		Continuum with Singular Interactions		
14:45-15:25	Xicheng Zhang	Non-smooth Stochastic Flows of Stochastic Differential		
		Equations		
15:25-15:40	Tea break			
15:40-16:20	Zhen Wu	BSDEs with Markov Chains and the Application:		
		Homogenization of Systems of PDEs		
16:20-17:00	Frank Riedel	Optimal Stopping under Ambiguity in Continuous Time		
17:00-17:40	Dong Han	The Hydrodynamical Limit for Some Random Graph		
		Processes		
17:40-18:20	Moritz	Approximation of Markov Jump Processes		
	Kassmann			
18:30-20:00	Dinner (Wuke H	otel, 物科宾馆)		

May 4(Tuesday), Conference Hall, Siyuan Building				
07:00-08:30	Breakfast			
Morning	Chairperson, Zhi-	Ming Ma		
08:30-09:30	Paul Malliavin	Canonical Brownian Motion on the Space of Jordan Curves of the Complex Plane		
09:30-10:30	Jean Michel Bismut	Special Speech in Honor of Paul Malliavin		
10:30-10:40	Matthias Hack	Address by First Counselor of Science and Technology of German Embassy in China		
10:40-11:10	Tea break (Pho	to taking)		
11:10-11:50	Mufa Chen	Basic Estimates of Ergodic Rate for One-Dimensional Diffusions		
11:50-12:30	Michael Röckner	Fokker-Planck Equations in Hilbert Spaces		
Noon 12:30–14:00	Lunch (Wuke Ho	otel, 物科宾馆)		
Afternoon	Chairperson, Michael Röckner			
14:00-14:40	Jiaan Yan	A New Look at the Lagrange Method for Continuous-time Stochastic Optimization		
14:40-15:20	Philippe Blanchard	Density Functional Theory on Phase Space		
15:20-16:00	Jiagang Ren	Support Theorem for Stochastic Variational Inequalities		
16:00-16:15	Tea break			
16:15–16:55	Anton Thalmaier	Harnack Inequalities on Riemannian Manifolds		
16:55-17:35	Shige Peng	Levy Processes under Uncertainty and Related Risk Measures		
17:35-18:15	Zhi-Ming Ma	Structure of Non-symmetric Dirichlet Forms		
18:30-21:00	Conference dinner (Fresh-Plus International Buffet, 汉莱国际美食百汇)			

May 5(We	ednesday),	Conference Hall, Siyuan Building
07:00-08:30	Breakfast	
Morning	Chairperson, Lim	ing Wu
08:30-09:10	Zhengyan Lin	Empirical Likelihood Inference for Diffusion Processes with
		Jumps
09:10-09:50	Yuri G.	Non-local Kinetic Equations from Markov Evolutions in
	Kondratiev	Continuum
09:50-10:30	Zengjing Chen	Strong Law of Large Numbers for Sublinear Expectations
10:30-10:45	Tea break	
10:45-11:25	Werner Kirsch	On Voting Systems with Correlated Voting Behavior
11:25-12:05	Shaoming Fei	Quantum Entanglement and Bell Inequalities

Noon	Lunch (Wuke Hotel, 物科宾馆)
12:05-13:35	
Afternoon	Free

May 6 (1	[hursday),	Conference Hall, Siyuan Building	
07:00-08:30	Breakfast		
Morning	Chairperson, Phili	ippe Blanchard	
08:30-09:10	Ludwig Streit	The Mathematics of Feynman Integrals: A Progress Report	
09:10-09:50	Fengyu Wang	Coupling and Strong Feller for O-U Jump Processes	
09:50-10:30	Ulrich Horst	Backward Stochastic Equations and Equilibrium Pricing in Incomplete Markets	
10:30-10:45	Tea break		
10:45-11:25	Rene Schilling	Densities and Density Estimates for Levy and Levy-type Processes	
11:25-12:05	Xiaowen Zhou	The Non-reversibility for Interacting Fleming-Viot Processes	
Noon	Lunch (Wuke Hotel, 物科宾馆)		
12:05-13:35			
Afternoon	Chairperson, Muf	à Chen	
13:35-14:15	Wilhelm	Functional Inequalities for the Wasserstein Dirichlet Form	
	Stannat		
14:15-14:55	Fuqing Gao	Stochastic Differential Equations Driven by G-Brownian Motion	
14:55-15:35	Barbara Gentz	Metastability in Systems of Coupled Diffusions	
15:35-15:50	Tea break		
15:50-16:30	Tyll Krüger	Generalized Epidemic Processes on Complex Networks	
		and Applications	
16:30-17:10	Xianping Guo	Constrained Markov Decision Processes with First Passage	
		Criteria	
17:10-17:50	Frederik	An Ultraproduct Construction of a Representative Individual	
	Herzberg	for an Arrovian Social Welfare Function	
17:50-18:30	Zhonggen Su	Gaussian Fluctuations for Hermite $\beta$ Ensembles	
18:30-20:00	Dinner (Wuke H	otel, 物科宾馆)	

May 7(F	riday), Co	nference	Hall	., Si	yuan B	uil	ding
07:00-08:30	Breakfast						
Morning	Chairperson, Yur	G. Kondratiev					
08:30-09:10	Peter Imkeller	Paleo-climatic	Time	Series:	Statistical	and	Dynamical
		Properties					

09:10-09:50	Zhenting Hou	Probabilistic Approach to Partial Differential-integral
		Equations in Operations Research
09:50-10:30	Max von	Well-posedness and Ergodicity of Stochastic Curve Shortening
	Renesse	Flow
10:30-10:45	Tea break	
10:45-11:25	Zenghu Li	Stochastic Equations and Measure-valued Flows
11:25-12:05	Oleksandr	On Ergodic Properties of Stochastic Evolutions in Individual
	Kutoviy	Based Population Models
Noon	Lunch (Wuke Ho	tel, 物科宾馆)
12:05-13:35		

There are three parallel sessions in the afternoon of May 7 (Friday)

May 7(Fr:	iday)afternc	oon, Session I,Room 703,Siyuan Building
Afternoon	Chairperson, Zhe	n Wu
13:35–13:55	Xianming Geng	A Sufficient Condition for the Transition Probability of Graph-valued Process Possessing the High Clustering Property
13:55–14:15	Wei Liu	Some Properties of Stochastic Evolution Equations in Variational Framework
14:15–14:35	Jiaowan Luo	The Existence and Uniqueness for Non-Lipschitz Stochastic Neutral Delay Evolution Equations Driven by Poisson Jumps
14:35-14:55	Julio Rodriguez	Networks of Limit Cycle Oscillators with Plastic Dynamics
14:55–15:15	Jinping Zhang	Stochastic Differential Equation Driven by Banach Space Valued Brownian Motion
15:15–15:35	Kehua Shi	Stochastic Wave Equation of Pure Jumps: Existence, Uniqueness and Invariant Measure
15:35-15:50	Tea break	
15:50-16:10	Juan Li	Mean-Field Backward Stochastic Differential Equations
16:10–16:30	Benjamin Gess	Random Attractors for Stochastic Partial Differential Equations
16:30-16:50	Fubao Xi	Ergodicity of Switched Jump-diffusion Processes
16:50-17:10	Lukasz Derdziuk	One- and Multicomponent Contact Models in Continuum
17:10-17:30	Jing Xu	Girsanov Type Theorem in G Framework
17:30-17:50	Tianxiao Wang	A Maximum Principle for Forward-backward Stochastic Volterra Integral Equations and Applications in Finance
17:50-18:10	Congli Wang	Graph-valued Measurable Mapping and the Uniqueness of Probability Measure
18:10-18:30	Chunyan Ji	Multigroup SIR Epidemic Model with Stochastic Perturbation
18:30-20:00	Dinner (Wuke H	otel, 物科宾馆)

May 7(Fri	.day)afterno	on, Session II,Room 712,Siyuan Building
Afternoon	Chariperson, Fuq	ing Gao
13:35-13:55	Chuanzhong	Some New Results about Asymptotic Properties of Additive
	Chen	Functionals of Brownian Motion
13:55-14:15	Jonas M. Tölle	Mosco Convergence of Weighted p-energies in Varying
		L <sup>p</sup> -spaces
14:15-14:35	Zaiming Liu	Research on a Class of Complex Queuing Systems
14:35-14:55	Peng Jin	Brownian Motion with Time-dependent Singular Drift
14:55-15:15	Caishi Wang	Quantum Local Time
15:15-15:35	Kainan Xiang	An Infinite Dimensional Cramer Theorem
15:35-15:50	Tea break	
15:50-16:10	Yingchao Xie	Poincare Inequality for Linear SPDE Driven by Levy Noise
16:10-16:30	Dennis	Dynamics in Infinite Particle Systems
	Hagedorn	
16:30-16:50	Xiangjun Wang	On the Fractional Quantum Brownian Motion
16:50-17:10	Jörg Vorbrink	American Options under Ambiguity in Continuous Time
		Finance
17:10-17:30	Zechun Hu	Balayages of Semi-Dirichlet Forms
17:30-17:50	Guolie Lan	Branching Processes for Epidemic in a Non-uniform
		Population
17:50-18:10	Jing Wu	Multivalued Stochastic Differential Equations Driven by Jump
		Processes
18:10-18:30	Ping Qiu	Degree Correlations in Networks with Preferential Attachment
		and Intrinsic Link
18:30-20:00	Dinner (Wuke H	otel, 物科宾馆)

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May 7(Fri	.day)aftern	oon, Session III, Room 709, Siyuan Building		
Afternoon	Chairperson, Zenghu Li			
13:35-13:55	Guoxin Liu	Optimal Dividend Problem for the Two-dimensional Diffusion		
		Model		
13:55-14:15	Bjoern	The Euler Scheme for Feller Processes		
	Boettcher			
14:15-14:35	Yingqiu Li	Weighted Moments for a Supercritical Branching Process in a		
		Varying or Random Environment		
14:35-14:55	Shun-Xiang	Non-homogeneous Generalized Mehler Semigroup and		
	Ouyang	Applications		
14:55-15:15	Zongxia Liang	Optimal Dividend and Financing Policy of Insurance Company		
		with Higher Solvency Constants		
15:15-15:35	Yong Chen	On the Power Spectrum Density of Markov Processes		
15:35-15:50	Tea break			

15:50-16:10	Jianzhong Lin	Chaotic and Predictable Representations for Multi-dimensional		
		Levy Processes		
16:10-16:30	Florian	A Non-autonomous Ornstein-Uhlenbeck Equation on Hilbert		
	Knäble	Space		
16:30-16:50	Dejun Luo	Quasi-invariant Flow Generated by SDE with Coefficients in		
		Sobolev Space		
16:50-17:10	Martin Venker	An Application of Stein's Method to Random Hermitian Matrices		
17:10-17:30	Fengxia Yang	The Green-Kubo Formula for General Markov Processes with		
		Continuous Time Parameter		
17:30-17:50	Matthias	Yosida Approximations for Multivalued Stochastic Partial		
	Stephan	Differential Equations		
17:50-18:10	Cong Yang	Default Time and Its Surplus Distribution under Jump-diffusion		
		Credit Risk Model		
18:30-20:00	Dinner (Wuke	Hotel, 物科宾馆)		

## Closing