W2 Stochastic calculus on manifolds, graphs, and random structures
(org. by R. Bass, B. Driver, D. Elworthy, K.T. Sturm)
October 8-12, 2007

Program:

The talks will take place in the HIM Lecture Hall in Poppelsdorfer Allee 45.

	Monday	Tuesday	Wednesday	Thursday	Friday
9:15 - 10:05	9.45 -10.35 Paul Malliavin	Takashi Shioya	Bruce Driver	Shigeki Aida	Takashi Kumagai
	Coffee	**Coffee**			
10:40 - 11:30	11.10-12.00 Yves Le Jan	Max von Renesse	Anton Thalmaier	Marc Arnaudon	Zhen-Qing Chen
11:40 - 12:30		Alexander Grigoryan	Motoko Kotani	Jean Picard	Dominique Bakry
	Lunch break			**Lunch Break**	
14:30 - 15:10	Moritz Kassmann	Josef Teichmann		Roland Friedrich	
15:20 - 16:00	Yuzuru Inahama	Laurent Decreusefond	**Excursion**	Kazumasa Kuwada	
	Tea			**Tea**	
16:30 - 17:10	Fabrice Baudoin	Kazuhiro Kuwae		Masha Gordina	
17:20 - 18:00	Ismael Bailleul	Hong Quan Li		Xiang Dong Li	

Please note the exceptional starting time for monday.

Shigeki Aida
> Hadamard's variation and Poincaré's lemma on a certain non-convex domain

Marc Arnaudon
> Gradient estimate and a Harnack inequality on Non-Compact Riemannian Manifolds

Ismael Bailleul
> tba

Dominique Bakry
> Gradient bounds for hypoelliptic semigroups

Fabrice Baudoin
> Some Aspects of stochastic differential equations driven by fractional Brownian motions

Zhen-Quing Chen
> Schramm-Löwner's Equation Driven by Stable Processes

Bruce Driver
> Integrated Harnack Inequalities

Roland Friedrich
> Deformations of the Disc

Masha Gordina
> Heat kernel analysis on an infinite-dimensional Heisenberg Group

Alexander Grigoryan
> On the dichotomy in the heat kernel bounds

Yuzuru Inahama
> A stochastic Taylor-like expansion in the rough path theory

Moritz Kassman
> The theory of De Giorgi for non-local operators and jump processes

Motoko Kotani
> Geometric aspects of random walks on a crystal lattice

Takashi Kumagai
> Diffusions on the scaling limits of critical percolation clusters in the diamond hierarchical lattice

Kazumasa Kuwada
> Intrinsic coupling under lower Ricci curvature bounds

Kazuhiro Kuwae
> On a Liouville type theorem of harmonic maps to convex spaces via Markov chains

Yves Le Jan
> Markov loops and fields

Hong Quan Li
> Optimal estimation of the gradient of the heat semigroup on the Heisenberg group and some related results

Xiang Dong Li
> On the L^P-Hodge theory over complete Riemannian manifolds

Paul Malliavin
> Non ergodicity of fluid dynamic with vanishing viscosity on a Torus

Jean Picard
> Integration, p-variation and trees

Max von Renesse
> Particle Approximation of the Wasserstein Diffusion on the Unit Interval

Takashi Shioya
> Laplacian on Alexandrov spaces

Josef Teichmann
> Natural OU-processes on Lie groups and their applications to Simulated Annealing with hypo-elliptic processes

Anton Thalmaier
> Gradient bounds and a priori estimates for heat flows by Stochastic Analysis