Stochastic Analysis on Large Scale Interacting Systems

Timetable

	Oct 26th (Mon)	Oct 27th (Tue)	Oct 28th (Wed)	Oct 29th (Thu)
9:20-10:00	Olla	Deuschel	Katori	Osada
10:10-10:50	Sasamoto	Hariya	Tsai	Gorin
11:10 - 11:50	Sasada	Otobe	Bufetov	Sakagawa
11:50 - 13:30	Lunch			
13:30 - 14:10	Lefevere	Weber	Tanemura	Shirai
14:20 - 15:00	Nagahata	Gubinelli	Duminil-Copin	Croydon
15:20 - 16:00	Nakashima	Abe	Misumi	Esaki
	Takahashi	Okada	Okamura	Kawamoto
16:10 - 16:50	Tsunoda	Nakamura	Nakajima	
	Xu	Tanaka	Kubota	

Program

October 26th (Mon)

9:20-10:00 **Stefano Olla (Université Paris Dauphine)**:
  Non-equilibrium macroscopic evolution of chain of oscillators with conservative noise

10:10-10:50 **Tomohiro Sasamoto (Tokyo Institute of Technology)**:
  Dualities for asymmetric interacting particle systems

11:10-11:50 **Makiko Sasada (The University of Tokyo)**:
  A new technique for the computation of central limit theorem variances for exclusion processes and its application

13:30-14:10 **Raphael Lefevere (Université Paris Diderot)**:
  Macroscopic diffusion in random Lorentz gases

14:20-15:00 **Yukio Nagahata (Niigata University)**:
  An estimate of spectral gap for surface diffusion

15:20-15:40 **Makoto Nakashima (University of Tsukuba)**:
  On phase transition of random walk pinning model

15:40-16:00 **Hiroshi Takahashi (Nihon University)**:
  Recurrence and transience of multi-dimensional Brox-type diffusion processes

16:10-16:30 **Kenkichi Tsunoda (The University of Tokyo)**:
  Static and dynamic large deviations for a reaction diffusion model

16:30-16:50 **Lu Xu (The University of Tokyo)**:
  Central limit theorem for stochastic heat equations in random environments

October 27th (Tue)

9:20-10:00 **Jean-Dominique Deuschel (TU Berlin)**:
  Invariance Principle for the Random Conductance Model with dynamic degenerate weights

10:10-10:50 **Yuu Hariya (Tohoku University)**:
  On an extension of the Brascamp-Lieb inequality

11:10-11:50 **Yoshiki Otobe (Shinshu University)**:
  Inverse Problems for Stochastic Transport Equations

11:50-13:30 **Lunch**

13:30-14:10 **Hendrik Weber (The University of Warwick)**:
  Φ^4 model on large scales

14:20-15:00 **Massimiliano Gubinelli (Universität Bonn)**
  Paracontrolled distributions and the KPZ equation.

15:20-15:40 **Yoshihiro Abe (Kyoto University)**:
  Extremes of local times for simple random walks on symmetric trees

15:40-16:00 **Izumi Okada (Tokyo Institute of Technology)**:
  Geometric structures of favorite points and late points of simple random walk and high points of Gaussian free field in two dimensions

16:10-16:30 **Chikara Nakamura (Kyoto University)**:
  Laws of the Iterated Logarithm for Random Walk on the Random Conductance Model

16:30-16:50 **Ryokichi Tanaka (Tohoku University)**:
  Random walk on Gromov hyperbolic groups: entropy and speed

October 28th (Wed)

9:20-10:00 **Makoto Katori (Chuo University)**:
  Elliptic Bessel Process and Elliptic Dyson Model Realized as Temporally Inhomogeneous Processes

10:10-10:50 **Li-Cheng Tsai (Stanford University)**:
  Infinite Dimensional Stochastic Differential Equations for Dyson's Brownian Motion

11:00-11:50 **Alexander I. Bufetov (Rice University)** :
  TBA

11:50-13:30 **Lunch**

13:30-14:10 **Hideki Tanemura (Chiba University)**:
  Stochastic differential equations related to random matrix theory

14:20-15:00 **Hugo Duminil-Copin (Université de Genève)**:
  A geometric approach to the Ising model

15:20-15:40 **Jun Misumi (Kochi university)**:
   Estimate on the diameter of a long-range percolation graph on the fractal lattice and its application

15:40-16:00 **Kazuki Okamura (Kyoto University)**:
  Enlargement of subgraphs of infinite graphs by Bernoulli percolation

16:10-16:30 **Shuta Nakajima (Kyoto University)**:
Concentration of First Passage Percolation

16:30-16:50 **Naoki Kubota (Nihon university)**:
Concentrations for the simple random walk in unbounded nonnegative potentials

October 29th (Thu)

9:20-10:00 **Hirofumi Osada (Kyushu University)**:
Ginibre interaction Brownian motions are sub-diffusive

10:10-10:50 **Vadim Gorin (MIT)**:
Largest eigenvalues in random matrix beta-ensembles: identification of the limit

11:10-11:50 **Hironobu Sakagawa (Keio University)**:
On the probability that Laplacian interface models stay positive in subcritical dimensions

11:50-13:30 **Lunch**

13:30-14:10 **Tomoyuki Shirai (Kyushu University)**:
On the topology of random simplicial complexes

14:20-15:00 **David Croydon (The University of Warwick)**
Quenched localisation in the Bouchaud trap model with slowly varying traps

15:20-15:40 **Syota Esaki (Tokyo Institute of Technology)**:
Infinite particle systems of long range jumps with long range interactions

15:40-16:00 **Yosuke Kawamoto (Kyushu University)**:
Finite particle approximation of infinite-dimensional SDE related to random matrices