

**VIII<sup>TH</sup> SYMPOSIUM  
STOCHASTIC ANALYSIS ON LARGE SCALE INTERACTING SYSTEMS**

DATE : Oct. 7 (WED) — Oct. 9 (FRI), 2009  
PLACE : Graduate School of Mathematical Sciences, University of Tokyo  
ORGANIZERS : Tadahisa FUNAKI (Univ. of Tokyo)  
Hirofumi OSADA (Kyushu Univ.)  
Yoshiki OTOBE (Shinshu Univ.)

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**Oct. 7 (WED)**

- 10:20–11:05 (45)** Hideki TANEMURA (Chiba Univ.)  
Markov Property of Dyson's Model with an Infinite Number of Particles
- 11:15–12:00 (45)** Makoto KATORI (Chuo Univ.)  
Zeros of entire functions and relaxation processes
- 13:15–14:15 (60)** Jean-Dominique DEUSCHEL (Technische Universität Berlin)  
Scaling limits of  $(1 + 1)$ -dimensional pinning models with Laplacian interaction
- 14:30–15:15 (45)** Hirofumi OSADA (Kyushu Univ.)  
Tagged particles of interacting Brownian motions with the 2D Coulomb potential and the stochastic domination of the Ginibre random point field
- 15:15–15:45 (30)** *Coffee Break*
- 15:45–16:10 (25)** Daisuke SHIRAISHI (Kyoto Univ.)  
Exact value of the resistance exponent for four dimensional random walk trace
- 16:10–16:35 (25)** Bin XIE (Shinshu Univ.)  
Impulsive noise driven fractional partial differential equations
- 16:45–17:10 (25)** Yoshiko OGATA (Univ. of Tokyo)  
Large deviations in quantum spin chains
- 17:10–17:35 (25)** Yoshiki OTOBE (Shinshu Univ.)  
Recurrence theorem and ergodicity of quantum dynamics

**Oct. 8 (THU)**

- 9:30–9:55 (25)** Kouji YANO (Kobe Univ.)  
Cameron–Martin formula for  $\sigma$ -finite measure unifying Brownian penalizations
- 9:55–10:20 (25)** Makoto NAKASHIMA (Kyoto Univ.)  
On the behavior of the population density of branching random walks
- 10:30–11:15 (45)** Akira SAKAI (Hokkaido Univ.)  
Asymptotic behavior of the gyration radius for long-range self-avoiding walk and long-range oriented percolation

- 11:20–11:45 (25)** Jun MISUMI (Univ. of Tokyo)  
Random walks on two dimensional continuum percolation clusters
- 13:15–14:00 (45)** Tomohiro SASAMOTO (Chiba Univ.)  
On the maximum of Dyson Brownian motion
- 14:10–14:55 (45)** Norio KONNO (Yokohama National Univ.)  
Localization of inhomogeneous coined quantum walks on the line
- 14:55–15:30 (35)** *Coffee Break*
- 15:30–15:55 (25)** Masahiro KANAI (Univ. of Tokyo)  
Exact partition function of the zero-range process and expectation values in the thermodynamic limit
- 15:55–16:20 (25)** Hiroshi WATANABE (Univ. of Tokyo)  
Huge-scale molecular dynamics simulation on gas-liquid multi-phase flow
- 16:30–17:30 (60)** *Short Communications*

Oct. 9 (FRI)

- 9:30–9:55 (25)** Kenshi HOSAKA (Ritsumeikan Univ.)  
An alternative condition for stochastic domination
- 9:55–10:20 (25)** Masato TAKEI (Osaka Electro-Communication Univ.)  
2D Ising percolation near critical external fields
- 10:30–11:15 (45)** Nobuo YOSHIDA (Kyoto Univ.)  
Power Law Fluids with Random Forcing
- 11:20–11:45 (25)** Hironobu SAKAGAWA (Keio Univ.)  
Confinement of the two dimensional discrete Gaussian free field between two hard walls
- 13:15–13:40 (25)** Yukio NAGAHATA (Osaka Univ.)  
Spectral gap for multi-species exclusion processes
- 13:45–14:30 (45)** Takashi KUMAGAI (Kyoto Univ.)  
Convergence of discrete Markov chains to jump processes
- 14:30–15:00 (30)** *Coffee Break*
- 15:00–15:25 (25)** Tomoyuki SHIRAI (Kyushu Univ.)  
Ginibre-type determinantal processes
- 15:25–15:50 (25)** Makiko SASADA (Univ. of Tokyo)  
Hydrodynamic limit and fluctuations for an evolutionary model of 2D Young diagrams
- 16:00–17:00 (60)** Claudio LANDIM (Instituto Nacional de Matemática Pura e Aplicada)  
Metastability of reversible condensed zero range processes on a finite set