

The First CREST-SBM International Conference

“Random Media”

Date: 25th Jan. (Mon.) 2010 — 29th Jan. (Fri.) 2010

Place: Sendai International Center

Program

25th January (Mon.)

- 10:10–10:50 Opening Remark
Osamu Ichimaru (Director, Innovation Headquarters, JST)
Yasumasa Nishiura (Research Director of the JST Mathematics Program)
Aiming for “Connective Knowledge” -On the Activities of the JST Mathematics Program
- 11:00–11:50 Opening Talk
Stanislav Molchanov (University of North Carolina)
Limit theorems for the reaction-diffusion equations
Lunch
- 13:40–14:20 Tomoyuki Shirai (Kyushu University)
Determinantal point processes associated with certain reproducing kernels
- 14:30–15:10 Ryoki Fukushima (Tokyo Institute of Technology)
Second order asymptotics for Brownian motion among heavy tailed Poissonian potentials
- 15:10–15:40 Tea+Poster1 (Fumio Nakajima, Quoc Pham-Van)
- 15:40–16:10 Claudio Cacciapuoti (Hausdorff Center for Mathematics)
Graph-like models for networks of thin tubes
- 16:10–16:40 Qing Hui Liu (Beijing Institute of Technology)
Gibbs-like measure for spectrum of a class of one-dimensional Schrödinger operator with Sturm potentials
- 16:50–17:30 F. Alberto Grünbaum (University of California, Berkeley)
Spectral methods for random walks: direct and inverse problems

26th January (Tue.)

- 10:00–10:50 Tadahisa Funaki (University of Tokyo)
Scaling limits for a dynamic model of 2D Young diagrams
- 11:00–11:50 Ilya Goldsheid (University of London, Queen Mary)
Lyapunov exponents of products of independent non-identically distributed matrices
Lunch
- 13:40–14:20 Svetlana Jitomirskaya (University of California, Irvine)
Eigenvalue statistics for ergodic localization
- 14:30–15:10 Masato Takei (Osaka Electro-Communication University)
Critical behavior for 2D Ising percolation
- 15:10–15:40 Tea+Poster2 (Shinji Kajimoto, Noriyoshi Sakuma)
- 15:40–16:10 Hakim Boumaza (Université Paris 13)
Localization for a matrix-valued Anderson model
- 16:10–16:40 Dayue Chen (Peking University)
Infinite collision property of random walks on a percolation cluster
- 16:50–17:30 Nobuo Yoshida (Kyoto University)
Branching random walks in random environment: Survival probability and growth rates

27th January (Wed.)

- 10:00–10:50 Diederik Wiersma (University Florence)
Photons, dust, and honey bees
- 11:00–11:50 Yoshiro Hirayama (Tohoku University)
Quantum Hall effect: Present and future
Lunch
- 13:40–14:20 An-Pang Tsai (Tohoku University)
Quasicrystals: Stability, structures and surface
- 14:30–15:10 Michael Baake (Universität of Bielefeld)
Mathematical diffraction theory of deterministic and stochastic structures
- 15:10–16:00 Tea+Poster3 (Y.Y.Liang, Tatsuro Yuge)
- 16:00–16:40 Tetsuo Mohri (Hokkaido University)
Order-disorder transition in alloy systems studied by cluster variation method
- 16:50–17:30 Tadafumi Adschiri (Tohoku University)
Mathematic and chemical engineering
- 18:30–20:30 Party

28th January (Thu.)

- 10:00–10:50 Ofer Zeitouni (Weizmann Institute/University of Minnesota)
Large deviations for random walks in random environments
- 11:00–11:50 Francis Comets (University Paris-Diderot)
Diffusivity of stochastic billiards in a random tube
Lunch
- 13:40–14:20 Norio Konno (Yokohama National University)
Localization and delocalization of quantum walks
- 14:30–15:10 Nobuaki Sugimine (Tohoku University)
On uniform convergence property of some crossing probabilities
in the 2D subcritical percolation and its application
- 15:10–15:40 Tea+Poster4 (Bin Wen)
- 15:40–16:10 Miyuki Koiso (Nara Women's University)
Geometric variational problems and bifurcation theory
- 16:10–16:40 Yoshiko Ogata (University of Tokyo)
Large deviations in quantum spin chains
- 16:50–17:30 Yohji Akama (Tohoku University)
Random fields over model sets with localized dependency

29th January (Fri.)

- 10:00–10:50 Takashi Kumagai (Kyoto University)
Behavior of random walks on random media at criticality
- 11:00–11:50 Tomasz Luczak (Adam Mickiewicz University)
Epidemic processes on random graphs
- 13:40–14:20 Closing Talk
Shinichi Kotani (Kwansei Gakuin University)
KdV flow on the space of generalized reflectionless potentials