Random Interacting Systems, Scaling Limits, and Universality
(04 Dec 2023–22 Dec 2023)

ORGANIZING COMMITTEE

Co-Chairs

Akira Sakai
Hokkaido University

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Venue

IMS Auditorium

Institute for Mathematical Sciences

3 Prince George's Park

Singapore 118402

For more information: http://tinyurl.com/scalinguniversality

Week 3
Workshop on Random Interacting Systems
(18–22 Dec 2023)

Monday, 18 December 2023

Time	Title	Speaker
09:00-09:30	Registration	
09:30-10:20	Local limit theorem for directed polymer beyond the L^2-phase	Stefan Junk Gakushuin University, Japan
10:20-10:50	Coffee Break	
10:50-11:40	Equivalence of fluctuations between SHE and KPZ equation in weak disorder regime	Shuta Nakajima Meiji University, Japan
11:40-12:30	The compact support property for stochastic heat equations	Kunwoo Kim Pohang University of Science and Technology, Korea
12:30-14:00	Lunch break	
14:00-14:50	Scaling limit of a long-range random walk in the time-correlated random environment	Jian Song Shandong University, China
14:50-15:20	Coffee Break	
15:20-16:10	KPZ fluctuations in the planar stochastic heat equation	Alejandro Ramírez NYU Shanghai, China

Tuesday, 19 December 2023

Time	Title	Speaker
09:00-09:30	Registration	
09:30-10:20	Universality of Poisson-Dirichlet law for log-correlated fields	Kyeongsik Nam Korea Advanced Institute of Science & Technology, Korea
10:20-10:50	Coffee Break	
10:50-11:40	Moments of Gaussian multiplicative chaos: various aspect	Yichao Huang Beijing Institute of Technology, China
11:40-12:30	What can we hear about the geometry of an LQG surface?	Mo Dick Wong Durham University, UK
12:30-14:00	Lunch break	
14:00-14:50	Multiple SLE and Dyson Brownian motion	Hao Wu Tsinghua University, China
14:50-15:20	Coffee Break	

Tuesday, 19 December 2023

Time	Title	Speaker
15:20-16:10	Conformally invariant fields out of Brownian loop soups	Wei Qian City University of Hong Kong, China CNRS, France
16:10-17:00	The Boosted Loop-Erased Random Walk	Xinyi Li Peking University, China
17:45-18:30	1-way transfer to Restaurant	
18:30-20:30	Dinner @ Jumbo Seafood Riverside Point	

Wednesday, 20 December 2023

Time	Title	Speaker
09:00-09:30	Registration	
09:30-10:20	Self-avoidance and random environment	Yuki Chino National Yang Ming Chiao Tung University, Hsinchu
10:20-10:50	Group Photo & Coffee Break	
10:50-11:40	Stability of the phase transition and critical behaviour of the Ising model against quantum perturbation	Yoshinori Kamijima National Center for Theoretical Sciences, Taipei
11:40-12:30	Metastates on one-dimensional long-range Ising model with random boundary condition	Eric Endo NYU Shanghai, China
12:30-14:00	*Lunch Reception at IMS*	

Thursday, 21 December 2023

Time	Title	Speaker
09:00-09:30	Registration	
09:30-10:20	Geometric Laplacians on self-conformal fractal curves in the plane	Naotaka Kajino Kyoto University, Japan
10:20-10:50	Coffee Break	
10:50-11:40	Random walk on a critical percolation cluster on a random hyperbolic half-planar triangulation	David Croydon Kyoto University, Japan
11:40-12:30	Universality of the Brownian net	Jinjiong Yu East China Normal University, China
12:30-14:00	Lunch break	
14:00-14:50	Bulk deviation lower bounds for the simple random walk	Maximilian Nitzschner The Hong Kong University of Science and Technology, China
14:50-15:20	Coffee Break	

Thursday, 21 December 2023		
Time	**Title**	**Speaker**
15:20-16:10	Energy landscape and metastability of Ising and Potts model without external field	Insuk Seo Seoul National University, Korea
16:10-17:00	Recent progress in planar critical first-passage percolation	Wai-Kit Lam National Taiwan University, Taipei

Friday, 22 December 2023		
Time	**Title**	**Speaker**
09:00-09:30	Registration	
09:30-10:20	PushASEP model on a periodic ring	Jhih-Huang Li National Taiwan University, Taipei
10:20-10:50	Coffee Break	
10:50-11:40	Harer-Zagier type recursion formula for the elliptic GinOE	Sung-Soo Byun Seoul National University, Korea
11:40-12:30	Non-Hermitian matrix-valued Brownian motion and the regularized Fuglede--Kadison determinant random-fields	Makoto Katori Chuo University, Japan
12:30-14:00	Lunch break	
14:00-14:50	Two dimensional dimers beyond planarity	Wei Wu NYU Shanghai, China
14:50-15:20	Coffee Break	
15:20-16:10	Hessian spectrum at the global minimum of locally isotropic Gaussian random fields	Qiang Zeng University of Macau, China

This schedule is accurate as of 15 December 2023. It is subjected to changes