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

Name & Affiliation	Talk Title
Morris Ang Columbia University, USA	Cutting Liouville quantum gravity by SLE with mismatched central charge
Tim Banova The University of Melbourne, Australia	Convergence of the voter model to historical Brownian motion in d > 2 dimensions
Sung-Soo Byun Seoul National University, Korea	Harer-Zagier type recursion formula for the elliptic GinOE
Gefei Cai Peking University, China	Proof of Delfino-Viti conjecture for 3-point connectivity of 2D critical percolation
Federico Camia NYU Abu Dhabi, UAE	Conformal covariance of connection probabilities and fields in 2D critical percolation
Lung-Chi Chen National Chengchi University, Taipei	A local limit theorem for the long-range self-avoiding walk
Yuki Chino National Yang Ming Chiao Tung University, Hsinchu	Self-avoidance and random environment
David Croydon Kyoto University, Japan	Random walk on a critical percolation cluster on a random hyperbolic half-planar triangulation
Francesca Cottini National University of Singapore, Singapore University of Luxembourg, Luxembourg	Quasi-critical fluctuations for the 2d directed polymers
Eric Endo NYU Shanghai, China	Metastates on one-dimensional long-range Ising model with random boundary condition
Ayana Ezoe Chuo University, Japan	Switching particle systems for foraging ants showing phase transitions in path selections
Roberto Fernandez Utrecht University, Netherlands NYU Shanghai, China	High-temperature cluster expansion for quantum spin lattice systems
Ryoki Fukushima Tsukuba University, Japan	Number of paths in oriented percolation as zero temperature limit of directed polymer

Name & Affiliation	Talk Title
Yifan Gao City University of Hong Kong, China	Scaling limit of the occupation measure of random walk cut points
Cristian Giardina Università degli Studi di Modena e Reggio Emilia, Italy	Integrable interacting particle systems: from micro to macro
Kohei Hayashi RIKEN, Japan	Kardar-Parisi-Zhang equation from Bernardin-Stoltz model
Markus Heydenreich Universität Augsburg, Germany	Percolation phase transition for the marked random connection model
Fumio Hiroshima Kyushu University, Japan	Localization of a renormalized Hamiltonian in QFT by a path measure
Mark Holmes The University of Melbourne, Australia	Lattice trees and friends in high dimensions
Yichao Huang Beijing Institute of Technology, China	Moments of Gaussian multiplicative chaos: various aspects
Tom Hutchcroft Caltech, USA	The near-critical two-point function and the torus plateau in high-dimensional percolation *Mini-Course* Topics in critical percolation
Stefan Junk Tohoku University, Japan	Local limit theorem for directed polymer beyond the L^2-phase
Naotaka Kajino Kyoto University, Japan	Geometric Laplacians on self-conformal fractal curves in the plane
Takashi Kumagai Waseda University, Japan	Heat kernel fluctuations and quantitative homogenization for the one-dimensional Bouchaud trap model
Yoshinori Kamijima National Center for Theoretical Sciences, Taipei	Stability of the phase transition and critical behavior of the Ising model against quantum perturbation
Makoto Katori Chuo University, Japan	Non-Hermitian matrix-valued Brownian motion and the regularized Fuglede--Kadison determinant random-fields
Noe Kawamoto Hokkaido University, Japan	Rate of convergence of the critical point for the memory-τ self-avoiding walk in dimension $d>4$

Name & Affiliation	Talk Title
Kunwoo Kim Pohang University of Science and Technology, Korea	The compact support property for stochastic heat equations
Wai-Kit Lam National Taiwan University, Taipei	Recent progress in planar critical first-passage percolation
Jhih-Huang Li National Taiwan University, Taipei	PushASEP model on a periodic ring
Xinyi Li Peking University, China	The Boosted Loop-Erased Random Walk
Yucheng Liu The University of British Columbia, Canada	Gaussian deconvolution and the lace expansion
Luca Makowiec National University of Singapore, Singapore	Diameter of Random Spanning Trees in Random Environment
Saori Morimoto Chuo University, Japan	Eigenvalue and pseudospectrum processes generated by the shift matrix with perturbation
Shuta Nakajima Meiji University, Japan	Equivalence of fluctuations between SHE and KPZ equation in weak disorder regime
Kyeongsik Nam Korea Advanced Institute of Science & Technology, Korea	Universality of Poisson-Dirichlet law for log-correlated fields
Maximilian Nitzschner The Hong Kong University of Science and Technology, China	Bulk deviation lower bounds for the simple random walk
Ryoichiro Noda Kyoto University, Japan	Convergence of local times of stochastic processes associated with resistance forms
Pierre Nolin City University of Hong Kong, China	Self-organized criticality and avalanches in 2D forest fires
Takumu Ooi Kyoto University, Japan	Scaling limit of Liouville simple random walk on Z^2
Hirofumi Osada Chubu University, Japan	Stochastic analysis for strongly correlated, infinite particle systems
Wei Qian City University of Hong Kong, China CNRS, France	Conformally invariant fields out of Brownian loop soups

Name & Affiliation	Talk Title
Alejandro Ramírez NYU Shanghai, China	KPZ fluctuations in the planar stochastic heat equation
Ryosuke Sato Chuo University, Japan	Stochastic dynamics on DPPs and GICAR algebras
Insuk Seo Seoul National University, Korea	Energy landscape and metastability of Ising and Potts model without external field
Tomoyuki Shirai Kyushu University, Japan	Zeros of random power series with stationary Gaussian coefficients
Daisuke Shiraishi Kyoto University, Japan	Loop-erased random walk in three dimensions
Ryosuke Shimizu Waseda University, Japan	Construction of first-order Sobolev spaces on the planar Sierpinski carpet
Gordon Slade The University of British Columbia, Canada	Boundary conditions and universal finite-size scaling in high dimensions
Jian Song Shandong University, China	Scaling limit of a long-range random walk in the time-correlated random environment
Xin Sun Peking University, China	Percolation Exponent, Conformal Radius for SLE, and Liouville Structure Constant *Mini-Course* SLE, LQG and LCFT
Yuya Tanaka Chuo University, Japan	Numerical study of eigenvector-overlaps and the regularized FK determinants of the non-Hermitian matrix-valued stochastic processes
Kenkichi Tsunoda Kyushu University, Japan	Incompressible limit for a weakly asymmetric simple exclusion process with collision
Remco van der Hofstad Eindhoven University of Technology, Netherlands	x-space asymptotics in high-dimensional percolation, lattice trees and lattice animals
Mo Dick Wong Durham University, UK	What can we hear about the geometry of an LQG surface?
Hao Wu Tsinghua University, China	Multiple SLE and Dyson Brownian motion
Wei Wu NYU Shanghai, China	Two dimensional dimers beyond planarity

Name & Affiliation	Talk Title
Aoteng Xia Peking University, China	Some progress on Random Field Ising Model
Jinjiong Yu East China Normal University, China	Universality of the Brownian net
Qiang Zeng University of Macau, China	Hessian spectrum at the global minimum of locally isotropic Gaussian random fields
Zijie Zhuang University of Pennsylvania, USA	Tightness of exponential metrics for log-correlated Gaussian fields in arbitrary dimension