

« **Disordered Systems, Random Spatial Processes and Some Applications** »
Paris, January 5th – April 3rd, 2015

Workshop

« **Spin Glasses, Random Graphs and Percolation** »
Paris, February 16th – 20th, 2015

Amphitheater Hermite



ORGANIZERS :

Jean-Philippe Bouchaud (École Polytechnique Paris)

Pierluigi Contucci (Bologna University)

Cristian Giardinà (Alma Mater Studiorum Università di Bologna)

Pierre Nolin (ETH Zurich)

Vladas Sidoravicius (IMPA Rio de Janeiro)

Vincent Vargas (ENS Paris)

SPEAKERS :

Diego Alberici (Bologna University)

Louis-Pierre Arguin (Montréal University)

Gérard Ben Arous (New York University)

Anton Bovier (Bonn University)

Andrea Cavagna (ISC – CNR)

Wei-Kuo Chen (University of Chicago)

Frank Den Hollander (Leiden University)

Hugo Duminil-Copin (Unige)

Claudio Giberti (University of Modena and Reggio E.)

Francesco Guerra (La Sapienza University)

Mark Holmes (Auckland University)

Dmitry Ioffe (Technion)

Nicola Kistler (Frankfurt University)

Emanuele Mingione (Bologna University)

Dmitry Panchenko (Texas A&M University)

Akira Sakai (Hokkaido University)

Shannon Starr (Alabama University)

Daniel Stein (Courant Institute)

Rongfeng Sun (Singapore National University)

Fabio Toninelli (Lyon 1 University)

Remeo van der Hofstad (Eindhoven University)

Francesco Zamponi (ENS Paris)

Lenka Zdeborova (CEA Saclay)

PROGRAM

Monday February 16th

09.00 am – 09.40 am	Registration – IHP Ground floor	
09.40 am – 10.30 am	Francesco Guerra	Legendre structures in statistical mechanics.
10.30 am – 11.00 am	Coffee break	IHP Ground floor
11.00 am – 11.50 am	Emanuele Mingione	A Monomer-Dimer model with random weights on the complete graph.
11.50 am – 12.40 pm	Shannon Starr	Spin glass techniques for non-Hermitian random matrices.
12.40 pm – 02.20 pm	Lunch break	
02.20 pm – 03.10 pm	Daniel Stein	Rugged Landscapes and Timescale Distributions in Complex Systems.
03.10 pm – 04.00 pm	Fabio Toninelli	A class of (2+1)-dimensional growth process with explicit stationary measure.
04.00 pm – 04.30 pm	Coffee break	IHP Ground floor

Tuesday February 17th

09.40 am – 10.30 am	Remeo van der Hofstad	Competition on scale-free random graphs.
10.30 am – 11.00 am	Coffee break	IHP Ground floor
11.00 am – 11.50 am	Claudio Giberti	Limit theorems for Ising models on random graphs.
11.50 am – 12.40 pm	Mark Holmes	WARM graphs.
12.40 pm – 02.20 pm	Lunch break	
02.20 pm – 03.10 pm	Nicola Kistler	A multiscale refinement of the second moment method.
03.10 pm – 04.00 pm	Louis-Pierre Arguin	Maxima of log-correlated Gaussian fields and of the Riemann Zeta function on the critical line.
04.00 pm – 04.30 pm	Coffee break	IHP Ground floor
04.30 pm – 05.20 pm	Anton Bovier	Extremal Processes of Gaussian Processes Indexed by Trees.

Wednesday February 18th

09.40 am – 10.30 am	Gérard Ben Arous	Scaling limit for the ant in a labyrinth.
10.30 am – 11.00 am	Coffee break	IHP Ground floor
11.00 am – 11.50 am	Frank Den Hollander	Annealed Scaling for a Charged Polymer.
11.50 pm – 12.40 pm	Rongfeng Sun	Polynomial chaos and scaling limits of disordered systems.

FREE AFTERNOON

Thursday February 19th

09.40 am – 10.30 am	Dmitry Ioffe	A quantitative Burton-Keane estimate under strong FKG condition.
10.30 am – 11.00 am	Coffee break	IHP Ground floor
11.00 am – 11.50 am	Akira Sakai	Critical correlation in high dimensions for long-range models with power-law couplings.
11.50 am – 12.40 pm	Hugo Duminil-Copin	A new proof of exponential decay of correlations in subcritical percolation and Ising models.
12.40 pm – 02.20 pm	Lunch break	
02.20 pm – 03.10 pm	Diego Alberici	Monomer-Dimer model on a class of random graphs.
03.10 pm – 04.00 pm	Lenka Zdeborova	Percolation on sparse networks.
04.00 pm – 04.30 pm	Coffee break	IHP Ground floor
04.00 pm – 04.30 pm	Poster Session	IHP Ground floor
05.00 pm – 06.00 pm	Andrea Cavagna	Public lecture Le septième étourneau : les merveilles du comportement collectif animal.
06.30 pm	Cocktail	IHP Ground floor

Friday February 20th

*09.40 am – 10.30 am	Dmitry Panchenko	Chaos in temperature in generic 2p-spin models.
10.30 am – 11.00 am	Coffee break	IHP Ground floor
11.00 am – 11.50 am	Wei-Kuo Chen	On the uniqueness and properties of the Parisi measure.
*11.50 am – 12.40 pm	Francesco Zamponi	Exact computation of the critical exponents of the jamming transition.

FREE AFTERNOON