

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

Workshop
« **Interacting Particles Systems and Non-equilibrium Dynamics** »
Paris, March 9th – 13th, 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 :

Cédric Bernardin (University of Nice Sophia-Antipolis)

Gioia Carinci (Università di Modena e Reggio Emilia)

Francis Comets (Paris Diderot)

Ivan Corwin (Columbia University)

Frank Den Hollander (Leiden University)

Bernard Derrida (LPS-ENS)

Pablo Ferrari (Universidad de Buenos Aires)

Patrick Ferrari (Universität Bonn)

Giambattista Giacomin (Paris Diderot/LPMA)

Giovanni Jona Lasinio (Università di Roma La Sapienza)

Antti Kupiainen (Helsinki University)

Jorge Kurchan (ENS)

Hubert Lacoin (IMPA)

Joël Lebowitz (Rutgers University)

Roberto Livi (Firenze)

Carlos Perez Espigarez (Università di Modena e Reggio Emilia)

Leonardo Rolla (Universidad de Buenos Aires)

Ellen Saada (MAP5, Univ. Paris Descartes)

Tomohiro Sasamoto (Tokyo Institute of Technology)

Herbert Spohn (Technical University Munich)

Julien Tailleur (Université Paris Diderot)

Cristina Toninelli (LPMA, Univ Paris VI-VII)

Dimitrios Tsagkarogiannis (University of Sussex)

PROGRAM

Monday March 9^{ne}

09.00 am – 09.40 am	Registration – IHP Ground floor	
09.40 am – 10.30 am	Joël Lebowitz	Lee-Yang Zeros, Central limit Theorems and More.
10.30 am – 11.00 am	Coffee break	IHP Ground floor
11.00 am – 11.50 am	Pablo Ferrari	Phase transition for the dilute clock model.
11.50 am – 12.40 pm	Giambattista Giacomin	Synchronization phenomena and non equilibrium statistical mechanics: the Kuramoto model.
12.40 pm – 02.20 pm	Lunch break	
02.20 pm – 03.10 pm	Cédric Bernardin	3/4 fractional superdiffusion of energy in a harmonic chain with bulk noises.
03.10 pm – 04.00 pm	Roberto Livi	Checking energy transport in new models.
04.00 pm – 04.30 pm	Coffee break	IHP Ground floor
04.30 pm – 05.00 pm	Chaired by Joël Lebowitz	Human Rights of Scientists.

Tuesday March 10th

09.40 am – 10.30 am	Tomohiro Sasamoto	Fluctuations for one-dimensional Brownian motions with oblique reflection.
10.30 am – 11.00 am	Coffee break	IHP Ground floor
11.00 am – 11.50 am	Patrick Ferrari	Height fluctuations for the stationary KPZ equation.
11.50 am – 12.40 pm	Antti Kupiainen	Renormalizing Stochastic PDE's.
12.40 pm – 02.20 pm	Lunch break	
02.20 pm – 03.10 pm	Hubert Lacoïn	Convergence to equilibrium for the exclusion process on the circle.
03.10 pm – 04.00 pm	Ellen Saada	Supercritical behavior of asymmetric zero-range process with sitewise disorder.
04.00 pm – 04.30 pm	Coffee break	IHP Ground floor
04.30 pm – 05.20 pm	Leonardo Rolla	Absorbing-state Phase Transitions: Challenges for Mathematicians.

Wednesday March 11th

09.40 am – 10.30 am	Bernard Derrida	Universal current fluctuations in non equilibrium systems.
10.30 am – 11.00 am	Coffee break	IHP Ground floor
11.00 am – 11.50 am	Gioia Carinci	Non-equilibrium via current reservoirs.
11.50 am – 12.40 pm	Dimitrios Tsagkarogiannis	Current reservoirs in the simple exclusion process.

FREE AFTERNOON

Thursday March 12th

09.40 am – 10.30 am	Giovanni Jona Lasinio	Time dependent large deviations and thermodynamic transformations.
10.30 am – 11.00 am	Coffee break	IHP Ground floor
11.00 am – 11.50 am	Cristina Toninelli	Kinetically constrained models: non-equilibrium dynamics.
11.50 am – 12.40 pm	Carlos Perez Espigarez	The spatial fluctuation theorem.
12.40 pm – 02.20 pm	Lunch break	
02.20 pm – 03.10 pm	Jorge Kurchan	Thermal dynamics and Darwinian dynamics.
03.10 pm – 04.00 pm	Julien Tailleur	What is the Pressure of an Active Particle Fluid?
04.00 pm – 04.30 pm	Coffee break	IHP Ground floor
04.00 pm – 05.00 pm	Poster Session	IHP Ground floor
05.00 pm – 06.00 pm	Frank Den Hollander	Public lecture Comment mieux comprendre le comportement des réseaux complexes?
06.30 pm	Cocktail	IHP Ground floor

Friday March 13th

09.40 am – 10.30 am	Francis Comets	Cover time of the random walk on the 2-dimensional torus.
10.30 am – 11.00 am	Coffee break	IHP Ground floor
11.00 am – 11.50 am	Ivan Corwin	Stochastic quantum integrable systems.
11.50 am – 12.40 pm	Herbert Spohn	One-dimensional Kardar-Parisi-Zhang equation with several components.

FREE AFTERNOON