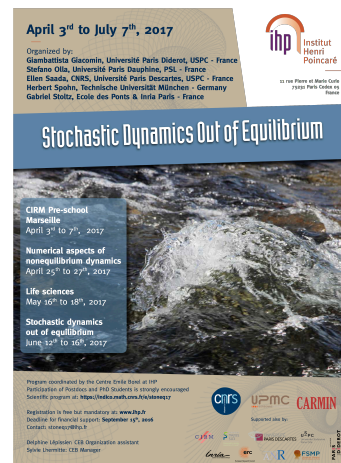


## « Stochastic Dynamics Out of Equilibrium » Paris, April 3<sup>rd</sup> – July 7<sup>th</sup>, 2017

### Stochastic Dynamics Out of Equilibrium Paris, June 12<sup>th</sup> – 16<sup>th</sup>, 2017 Amphitheatres Hermite and Darboux



**Organizers :** **Giambattista Giacomin** (Université Paris Diderot, USPC, France), **Stefano Olla** (Université Paris Dauphine, PSL, France), **Ellen Saada** (CNRS, Université Paris Descartes, USPC, France), **Herbert Spohn** (Technische Universität München, Germany), **Gabriel Stoltz** (École des Ponts & Inria Paris, France)

#### Invited speakers :

**Jinho Baik** (U. Michigan)

**Guillaume Barraquand** (U. Columbia)

**Cédric Bernardin** (U. Nice)

**Thierry Bodineau** (Ecole Polytechnique & CNRS)

**Anna De Masi** (U. L'Aquila)

**Frank Den Hollander** (U. Leiden)

**Alessandra Faggionato** (U. Roma La Sapienza)

**Pablo Ferrari** (U. Buenos Aires)

**Tadahisa Funaki** (U. Tokyo)

**Giovanni Gallavotti** (U. Roma La Sapienza)

**Massimiliano Gubinelli** (U. Bonn)

**Milton Jara** (IMPA)

**Gianni Jona-Lasinio** (U. Roma La Sapienza)

**Hubert Lacoin** (IMPA)

**Claudio Landim** (IMPA & CNRS, Univ. Rouen)

**Joel Lebowitz** (U. Rutgers)

**Carlangelo Liverani** (U. Roma Tor Vergata)

**Jonathan Mattingly** (U. Duke)

**Tom Mountford** (EPFL)

**Frank Redig** (TU Delft)

**Makiko Sasada** (U. Tokyo)

**Timo Seppalainen** (U. Wisconsin)

**Fabio Toninelli** (U. Lyon 1 & CNRS)

**S.R.S. Varadhan** (Courant Institute NYU)

**Maria Eulalia Vares** (U. Federale Rio de Janeiro)

## PROGRAM

### Monday June 12<sup>th</sup>

09.00 am – 09.25 am	<b>Registration and Welcome coffee – IHP ground floor</b>	
09.25 am – 09.30 am	<b>Introductory remarks</b>	
09.30 am – 10.20 am	<b>S.R.S. Varadhan</b>	A closer look at the Polaron measure.
10.20 am – 10.50 am	Coffee break	IHP ground floor
10.50 am – 11.40 am	<b>Carlangelo Liverani</b>	Deterministic fast-slow systems: beyond averaging.
11.40 am – 12.30 am	<b>Anna De Masi</b>	Uphill diffusion in the 2D nearest-neighbor Ising model.
12.30 am – 02.30 pm	Lunch break	
02.30 pm – 03.20 pm	<b>Timo Seppalainen</b>	Variational formulas and geodesics for percolation models.
03.20 pm – 04.10 pm	<b>Joel Lebowitz</b>	Statistical Mechanics and Thermodynamics of Large and Small Systems.
04.10 pm – 04.40 pm	Coffee break	IHP ground floor
04.40 pm – 06.00 pm	<b>Poster session</b>	IHP ground floor

### Tuesday June 13<sup>th</sup>

09.30 am – 10.20 am	<b>Thierry Bodineau</b>	From hard sphere dynamics to the linearized Boltzmann equation.
10.20 am – 10.50 am	Coffee break	IHP ground floor
10.50 am – 11.40 am	<b>Tom Mountford</b>	Convergence to upper equilibrium for kinetic gas models.
11.40 am – 12.30 am	<b>Giovanni Gallavotti</b>	Reversibility and equivalence of non equilibrium ensembles.
12.30 am – 02.30 pm	Lunch break	
02.30 pm – 03.20 pm	<b>Jinho Baik</b>	Multi-time distribution of periodic TASEP.
03.20 pm – 04.10 pm	<b>Guillaume Barraquand</b>	ASEP on the positive integers with an open boundary and the KPZ equation in a half space.
04.10 pm – 04.40 pm	Coffee break	IHP ground floor
04.40 pm – 05.30 pm	<b>Jonathan Mattingly</b>	Interactions between noise and instabilities.
<b>06.00 pm – 08.30 pm</b>	<b>Cocktail Dinner</b>	<b>Pierre and Marie Curie University Zamansky Tower – 24<sup>th</sup> floor 4 place Jussieu – 75005 Paris Subway line 7 – Station : Jussieu Note : bring your ID card or Passport</b>

### Wednesday June 14<sup>th</sup>

09.30 am – 10.20 am	<b>Cédric Bernardin</b>	Diffusion versus Superdiffusion in a stochastic Hamiltonian lattice field model.
10.20 am – 10.50 am	<b>Coffee break</b>	IHP ground floor
10.50 am – 11.40 am	<b>Milton Jara</b>	Non-equilibrium fluctuations of interacting particle systems.

11.40 am – 12.30 am	<b>Gianni Jona-Lasinio</b>	Finite time thermodynamics and quantitative analysis of Clausius inequality.
12.30 am – 02.30 pm	Lunch break	
02.30 pm – 03.20 pm	<b>Maria Eulalia Vares</b>	Some results on two-dimensional anisotropic Ising spin systems and percolation.
03.20 pm – 03.50 pm	<b>Joel Lebowitz</b>	Human Rights session.
03.50 pm – 04.20 pm	Coffee break	
04.20 pm – 05.10 pm	<b>Tadahisa Funaki</b>	IHP ground floor Invariant measures in coupled KPZ equations.
06.00 pm – 07.00 pm <b>Public lecture by Isabelle Gallagher (Université Paris Diderot) : Probabilités, Irréversibilité et Propagation du chaos.</b>		

#### Thursday June 15<sup>th</sup>

09.30 am – 10.20 am	<b>Frank Den Hollander</b>	Metastability for the Widom-Rowlinson Model.
10.20 am – 10.50 am	Coffee break	
10.50 am – 11.40 am	<b>Claudio Landim</b>	IHP ground floor Stationary states of non-reversible dynamics.
11.40 am – 12.30 am	<b>Alessandra Faggionato</b>	1d Mott variable range hopping.
12.30 am – 02.30 pm	Lunch break	
02.30 pm – 03.20 pm	<b>Makiko Sasada</b>	Thermal conductivity for a chain of harmonic oscillators in a magnetic field.
03.20 pm – 04.10 pm	<b>Fabio Toninelli</b>	Discrete interface dynamics and hydrodynamic limits.
04.10 pm – 04.40 pm	Coffee break	
04.40 pm – 05.30 pm	<b>Hubert Lacoïn</b>	IHP ground floor Cutoff phenomenon for the asymmetric simple exclusion process and the biased card shuffling.

#### Friday June 16<sup>th</sup>

09.30 am – 10.20 am	<b>Pablo Ferrari</b>	Hydrodynamics of N Branching Brownian motions with selection.
10.20 am – 10.50 am	Coffee break	
10.50 am – 11.40 am	<b>Frank Redig</b>	IHP ground floor The asymmetric KMP model.
11.40 am – 12.30 am	<b>Massimiliano Gubinelli</b>	Weak universality of fluctuations and singular stochastic PDEs.

Abstracts are available on the website of the trimester « Stochastic Dynamics Out of Equilibrium »  
<http://indico.math.cnrs.fr/e/stoneq17/capstone>

