

# INHOMOGENEOUS RANDOM SYSTEMS

## *Systèmes Aléatoires Inhomogènes*

January 25-26, 2011

ESPCI & Institut Henri Poincaré  
10, rue Vauquelin - Paris - 11, rue Pierre et Marie Curie

Tuesday, January 25<sup>th</sup> (ESPCI):

**Kinetically constrained spin models, glasses and coalescence processes.**

Moderators: **Fabio Martinelli, Cristina Toninelli.**

- 9h15 – 9h30 : Opening
- 9h30 – 9h40 : **Fabio Martinelli (Roma):** *Introduction.*
- 9h40 – 10h30 : **Giulio Biroli (Saclay):** *Glass transition and kinetically constrained models.*
- 10h30 – 10h50 : Coffee Break
- 10h50 – 11h40 : **Peter Sollich (London):** *Space-time phase transitions and biased steady states in kinetically constrained models.*
- 11h40 – 12h30 : **Thierry Bodineau (Paris):** *Phase transition in kinetically constrained models.*
- 12h30 – 14h20 : Lunch
- 14h20 – 15h10 : **Bernard Derrida (Paris):** *Universal distributions in one dimensional coarsening models.*
- 15h10 – 16h00 : **Alessandra Faggionato (Roma):** *Scaling limits in one dimensional hierarchical coalescence processes.*
- 16h00 – 16h20 : Coffee Break
- 16h20 – 17h10 : **Cristina Toninelli (Paris):** *East model: rigorous results for the low temperature non-equilibrium dynamics.*
- 17h10 – 18h00 : **Jean Bertoin (Paris):** *Burning cars in a parking.*

Wednesday, January 26<sup>th</sup> (IHP):

**Fast and slow, adiabatic and geometric effects in nonequilibrium dynamics.**

Moderator: **Christian Maes.**

- 9h10 – 9h40 : **Christian Maes (Leuven):** *Corrections to Archimedes' law in granular media and other statistical forces.*
- 9h40 – 10h30 : **Karel Netočný (Praha):** *Quasistatic heat processes in small non-equilibrium systems.*
- 10h30 – 10h50 : Coffee Break
- 10h50 – 11h40 : **Joseph Avron (Haifa):** *Geometry of quantum transport of open quantum systems.*
- 11h40 – 12h30 : **Gian-Michele Graf (Zürich):** *Adiabatic evolution and dephasing.*
- 12h30 – 14h20 : Lunch
- 14h20 – 15h10 : **Wojciech De Roeck (Heidelberg):** *Diffusion in Hamiltonian quantum systems.*
- 15h10 – 16h00 : **Nils Berglund (Orléans):** *The Kramers law - validity, derivations and generalizations.*
- 16h00 – 16h20 : Coffee Break
- 16h20 – 17h10 : **Robert MacKay (Warwick):** *Langevin equation for slow degrees of freedom of Hamiltonian systems.*
- 17h10 – 18h00 : **Senya Shlosman (Marseille):** *Spontaneous resonances and multiple steady states in the queuing networks.*

Informations and abstracts at: <http://www.u-cergy.fr/lptm/inter/>

## Registration:

The conference is free and open to all.

To facilitate local organization, please register in advance by sending an e-mail with your name, affiliation and mail address to:

**inter@math.cnrs.fr** with subject: **IRS 2011**

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