# INHOMOGENEOUS RANDOM SYSTEMS
## *Systèmes Aléatoires Inhomogènes*

**January 23-24, 2007**
Amphi Hermite
Institut Henri Poincaré
11, rue Pierre et Marie Curie, Paris
http://www.ihp.jussieu.fr

Tuesday 23 January:
**Stochastic models of selection and coalescence.**
Moderator: **Bernard Derrida**.

8h45 – 9h00 : Opening

9h00 – 9h20 : **Bernard Derrida (Paris)**: *Introduction.*

9h20 – 10h05 : **Carl Mueller (Rochester)**: *The speed of a random traveling wave for the KPP equation.*

10h05 – 10h50 : **Eric Brunet (Paris)**: *Effect of noise on front propagation.*

10h50 – 11h10 : Coffee Break

11h10 – 11h55 : **David A. Kessler (Ramat-Gan)**: *Running for your life: Optimal Dispersal Rates.*

11h55 – 12h40 : **Feng Yu (Oxford)**: *Limit to the rate of adaptation and overcoming Muller's Ratchet.*

12h40 – 14h15 : Lunch

14h15 – 15h00 : **Erwin Bolthausen (Zürich)**: *On the Derrida-Ruelle cascades, and the ultrametricity issue in spin glass theory.*

15h00 – 15h45 : **Jean-François Le Gall (Paris)**: *Branching processes and the Bolthausen-Sznitman coalescent.*

15h45 – 16h05 : Coffee Break

16h05 – 16h50 : **Esteban Moro (Madrid)**: *Modeling and simulation of branching problems using continuum models.*

16h50 – 17h35 : **Stéphane Munier (Palaiseau)**: *Effect of selection on ancestry.*

Wednesday 24 January:
**Dynamics and statistics of non-equilibrium phenomena.**
Moderator: **Claude-Alain Pillet**.

9h15 – 9h35 : **Claude-Alain Pillet (Toulon)**: *Introduction.*

9h35 – 10h25 : **Martin Hairer (Warwick)**: *Ergodic theory for a class of non-Markovian processes.*

10h25 – 10h45 : Coffee Break

10h45 – 11h35 : **Christian Maes (Leuven)**: *Nonequilibrium fluctuations.*

11h35 – 12h25 : **Davide Gabrielli (L'Aquila)**: *Current fluctuations in stochastic lattice gases.*

12h25 – 14h00 : Lunch

14h00 – 14h50 : **François Germinet (Cergy)**: *Kubo Formula and random Schrödinger operators.*

14h50 – 15h40 : **François Castella (Rennes)**: *Partial results on the derivation of the nonlinear quantum Boltzmann equations from large quantum systems of interacting particles.*

15h40 – 16h00 : Coffee Break

16h00 – 16h50 : **Wojciech De Roeck (Leuven)**: *Quantum fluctuations: From Hamiltonian dynamics to unravelings of master equations.*

16h50 – 17h40 : **Laurent Bruneau (Cergy)**: *Repeated interaction quantum systems.*

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 2007**

or mail to Ellen Saada, Laboratoire de Mathématiques Raphaël Salem,
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