INHOMOGENEOUS RANDOM SYSTEMS
Systèmes Aléatoires Inhomogènes

January 22-23, 2019

Institut Henri Poincaré
Amphithéâtre Hermite, Amphithéâtre Darboux
11 rue Pierre et Marie Curie, Paris
http://www.ihp.fr

Tuesday 22 January:
Quantum dynamics in and out of equilibrium
Moderator: **Kirone Mallick (Saclay)**

9h00 – 9h15 : Opening

9h15 – 9h40 : **Kirone Mallick (Saclay)**: *Introduction.*

9h40 – 10h30 : **Tomaž Prosen (Ljubljana)**: *Exact spectral form factor and entanglement spreading in a minimal model of Many-Body Quantum Chaos.*

10h30 – 10h50 : Coffee Break

10h50 – 11h40 : **Yan Pautrat (Orsay)**: *Landauer's principle in repeated interaction systems.*

11h40 – 12h30 : **Krzysztof Gawędzki (Lyon)**: *Full counting statistics of heat transfers in nonequilibrium Conformal Field Theory.*

12h30 – 14h00 : Lunch

14h00 – 14h50 : **Michel Bauer (Saclay)**: *Equilibrium Fluctuations in Maximally Noisy Extended Quantum Systems.*

14h50 – 15h40 : **François Huveneers (Paris)**: *The many-body localization transition.*

15h40 – 16h00 : Coffee Break

16h00 – 16h50 : **Mazyar Mirrahimi (Paris)**: *A hardware-efficient and scalable approach to fault-tolerant quantum computation.*

16h50 – 17h40 : **Jean-Marc Luck (Saclay)**: *Selected topics on the dynamics of quantum walkers.*

Wednesday 23 January:
Large scale description of random fields: interfaces between PDE and RG approaches
Moderator: **Massimiliano Gubinelli (Bonn)**

9h00 – 9h25 : **Massimiliano Gubinelli (Bonn)**: *Introduction.*

9h25 – 10h15 : **Ajay Chandra (London)**: *Renormalization in regularity structures.*

10h15 – 11h05 : **Patrícia Gonçalves (Lisboa)**: *Deriving the stochastic Burgers equation from weakly asymmetric interacting particle systems.*

11h05 – 11h25 : Coffee Break

11h25 – 12h15 : **Jérémie Unterberger (Nancy)**: *The scaling limit of the KPZ equation in space dimension 3 and higher.*

12h15 – 13h05 : **Martina Hofmanová (Bielefeld)**: *A PDE construction of the Euclidean* Φ^4_3 *quantum field theory.*

13h05 – 14h30 : Lunch

14h30 – 15h20 : **Roman Kotecký (Warwick)**: *Vector gradient fields as microscopic models of nonlinear elasticity.*

15h20 – 16h10 : **Lorenzo Zambotti (Paris)**: *Renormalisation of geometric SPDEs.*

16h10 – 17h00 : **Antti Kupiainen (Helsinki)**: *Renormalization Group, Quantum fields and Stochastic PDEs.*

Informations and abstracts at: **http://irs.math.cnrs.fr**

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 2019**

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