

INHOMOGENEOUS RANDOM SYSTEMS

Systèmes Aléatoires Inhomogènes

January 26-27 2016

Institut Henri Poincaré
11 rue Pierre et Marie Curie, Paris
<http://www.ihp.fr>

Tuesday, January 26th:

Phase transitions in percolation-type models.

Moderator: **Hugo Duminil-Copin (Genève)**.

- 9h00 – 9h30 : Opening
- 9h30 – 10h20 : **Hugo Duminil-Copin (Genève)**: *Phase transitions in percolation-type models: an introduction.*
- 10h20 – 11h10 : **Vincent Tassion (Genève)**: *Critical behavior of Fortuin-Kasteleyn percolation in two dimensions.*
- 11h10 – 11h30 : Coffee Break
- 11h30 – 12h20 : **Ioan Manolescu (Fribourg)**: *Bond percolation on isoradial graphs.*
- 12h20 – 13h50 : Lunch
- 13h50 – 14h40 : **Michael Aizenman (Princeton)**: *Topological roots of the fermionic structures seen in the 2D Ising model.*
- 14h40 – 15h30 : **Dmitry Chelkak (Genève & Saint Petersburg)**: *Magnetization in the layered Ising model.*
- 15h30 – 15h50 : Coffee Break
- 15h50 – 16h40 : **Alessandro Giuliani (Roma)** : *Periodic striped ground states in Ising models with competing interactions.*
- 16h40 – 17h30 : **Christophe Garban (Lyon)**: *Exceptional times for critical percolation under conservative dynamics.*

Wednesday, January 27th:

Polymers, interfaces and self-interacting random-walks.

Moderator: **Dmitry Ioffe (Haifa)**.

- 9h20 – 10h10 : **Dmitry Ioffe (Haifa)**: *Scaling limits for ordered walks under area tilts.*
- 10h10 – 11h00 : **Atilla Yılmaz (Istanbul)**: *Variational formulas and disorder regimes of random walks in random potentials.*
- 11h00 – 11h20 : Coffee Break
- 11h20 – 12h10 : **François Simenhaus (Paris)**: *Random walk driven by the simple exclusion process.*
- 12h10 – 13h40 : Lunch
- 13h40 – 14h30 : **Frank den Hollander (Leiden)**: *Annealed scaling for a charged polymer.*
- 14h30 – 15h20 : **Pietro Caputo (Roma)**: *Entropic repulsion and limit shape for the $(2 + 1)$ -dimensional SOS interface above a wall.*
- 15h20 – 15h40 : Coffee Break
- 15h40 – 16h30 : **Pierre Tarrès (Paris)**: *Edge reinforced random walk and statistical physics.*
- 16h30 – 17h20 : **Bálint Tóth (Bristol & Budapest)**: *Super-diffusivity of the periodic Lorentz-gas in the Boltzmann-Grad limit.*

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 2016**

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