

INHOMOGENEOUS RANDOM SYSTEMS

Systèmes Aléatoires Inhomogènes

January 28-29, 2020

Institut Curie
Amphithéâtre Curie
11-13 rue Pierre et Marie Curie, Paris

Tuesday 28 January:

Logarithmically correlated random fields

Moderator: **Nathanaël Berestycki (Wien)**

- 9h00 – 9h10 : Opening
- 9h10 – 9h30 : **Nathanaël Berestycki (Wien)**: *Introduction.*
- 9h30 – 10h20 : **Christian Webb (Aalto)**: *How much can the eigenvalues of a random Hermitian matrix fluctuate?*
- 10h20 – 11h10 : **Janne Junnila (Lausanne)**: *Imaginary chaos.*
- 11h10 – 11h30 : Coffee Break
- 11h30 – 12h20 : **Avelio Sepulveda (Lyon)**: *Imaginary chaos and the level sets of the Gaussian free field.*
- 12h20 – 13h10 : **Vincent Vargas (Paris)**: *A probabilistic approach of ultraviolet renormalisation in the boundary Sine-Gordon model.*
- 13h10 – 14h20 : Lunch
- 14h20 – 15h10 : **Ellen Powell (Durham)**: *Critical Gaussian multiplicative chaos.*
- 15h10 – 16h00 : **Antoine Jego (Wien)**: *Thick points of random walk and multiplicative chaos.*
- 16h00 – 16h50 : **Ofer Zeitouni (Rehovot)**: *Extremes for log-correlated fields: beyond the Gaussian case.*

Wednesday 29 January:

Emergent CFTs in statistical mechanics

Moderator: **Alessandro Giuliani (Roma)**

- 9h10 – 10h00 : **Alessandro Giuliani (Roma)**: *Conformal invariance and Renormalization Group.*
- 10h00 – 10h50 : **Federico Camia (Abu Dhabi)**: *Planar Ising model and Euclidean field theory.*
- 10h50 – 11h10 : Coffee Break
- 11h10 – 12h00 : **Clément Hongler (Lausanne)**: *Ising Model and Conformal Field Theory.*
- 12h00 – 12h50 : **Dmitry Chelkak (Paris)**: *Bipartite dimer model: perfect t -embeddings and convergence to the GFF.*
- 12h50 – 14h15 : Lunch
- 14h15 – 15h05 : **Jesper Jacobsen (Paris)**: *Four-point functions in the Fortuin-Kasteleyn cluster model.*
- 15h05 – 15h55 : **Vieri Mastropietro (Milano)**: *Universality in Ising, Vertex, Dimers and beyond.*
- 15h55 – 16h45 : **Slava Rychkov (Bures)**: *3D Ising model: a view from the (conformal bootstrap) island.*

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 2020**

François Dunlop
Physique Théorique et Modélisation
Université de Cergy-Pontoise
(33)1 3425 7509

Ellen Saada
Mathématiques Appliquées à Paris 5
Université Paris Descartes
(33)1 7653 0376

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