

« Combinatorics and Interactions » Paris, January 9th – March 31st, 2017

Workshop on Large Random Structures in Two Dimensions

Paris, January 16th – 20th, 2017

Amphitheater Hermite



Organizers : Marie Albenque (LIX, École polytechnique) and Cédric Boutillier (LPMA, Université Pierre et Marie Curie)

Invited speakers : Louigi Addario-Berry (McGill University) Omer Angel (University of British Columbia) Jérémie Bouttier (CEA, ENS Lyon) Timothy Budd (Niels Bohr Institute) Alessandra Caraceni (University of Bath) Guillaume Chapuy (IRIF Paris) Mihai Ciucu (Indiana University) Hugo Duminil-Copin (Geneva University) Erik Duse (University of Helsinki) Patrick Ferrari (Bonn University) Adrien Kassel (ENS, Lyon)

Richard Kenyon (Brown University) Benoît Laslier (Cambridge University) Zhongyang Li (University of Connecticut) Svante Linusson (KTH Stockholm) Irène Marcovici (IECL Nancy) Grégory Miermont (ENS Lyon) Sevak Mkrtchyan (Rochester University) Peter Nejjar (IST Austria) Jonathan Novak (University of California) Greta Panova (University of Pennsylvania)

PROGRAM

Monday January 16th **Registration and welcome coffee** – IHP ground floor 09.30 am – 10.00 am On the geometry of random surfaces with a boundary. **Grégory Miermont** 10.00 am - 10.50 amSelf-Avoiding Walks on Random Quadrangulations. 11.00 am - 11.50 amAlessandra Caraceni 11.50 am – 02.00 pm Lunch break – Free time 02.00 pm – 02.50 pm Does Eulerian percolation on the square lattice percolate? Irène Marcovici 02.50 pm - 03.40 pm **Benoît Laslier** Universality of height fluctuations in the dimer mode. 03.40 pm – 04.10 pm Coffee break IHP ground floor 04.10 pm - 05.00 pm Svante Linusson Reverse juggling. **Tuesday January 17th** IHP ground floor 09.30 am - 10.00 amCoffee break TBA. 10.00 am - 10.50 am **Omer Angel Guillaume Chapuy** Voronoï tessellations of Brownian maps, Painlevé-I recurrence, and bijections: an observation and a conjecture. 11.00 am – 11.50 am 11.50 am – 02.00 pm Lunch break – Free time 02.00 pm - 02.50 pmThe GUE corners process for volume measures on lozenge tilings. Sevak Mkrtchvan 02.50 pm - 03.40 pm Greta Panova Lozenge tilings: from combinatorics, through algebra, to probability. IHP ground floor 03.40 pm - 04.10 pmCoffee break 04.10 pm – 05.00 pm The free boundary Schur process and applications. Jérémie Bouttier 06.00 pm – 09.00 pm Cocktail Dinner party **IHP Ground floor** Wednesday January 18th 09.30 am - 10.20 am **Richard Kenvon** Linear spaces of tilings. IHP ground floor 10.20 am - 10.50 amCoffee break 10.50 am – 11.40 pm Lozenge tilings with gaps in a 90 degree wedge domain with mixed boundary conditions. Mihai Ciucu 11.40 am – 12.30 pm Lozenge tilings, HCIZ integrals, and Hurwitz numbers. Jonathan Novak

Thursday January 19th

09.30 am - 10.00 am	Coffee break	IHP ground floor
10.00 am - 10.50 am	Hugo Duminil-Copin	Order-disorder operators in the critical Ising model on planar and almost planar graphs.
11.00 am - 11.50 am	Timothy Budd	On a connection between planar map combinatorics and lattice walks.
11.50 am - 02.00 pm	Lunch break – Free time	
02.00 pm - 02.50 pm	Patrick Ferrari	Anisotropic (2+1)-d growth and Gaussian limits of q-Whittaker processes.
02.50 pm - 03.40 pm	Erik Duse	The Cusp-Airy Process.
03.40 pm - 04.10 pm	Coffee break	IHP ground floor
04.10 pm - 05.00 pm	Zhongyang Li	Phase transitions in the 1-2 model.
Friday January 20 th		
09.30 am – 10.20 am	Adrien Kassel	Active spanning trees and SchrammLoewner evolution.
10.20 am – 10.50 am	Coffee break	IHP ground floor
10.50 am – 11.40 am	Peter Nejjar	Fluctuations of the Competition Interface in Presence of Shocks.
11.40 am – 12.30 pm	Louigi Addario-Berry	Random maps and random trees: limits, symmetries, and embeddings.

Abstracts are available on the website of the trimester « Combinatorics and Interactions »: http://combi17.math.cnrs.fr/?sec=workshop1



UPPC SORBONNE UNIVERSITÉS

Institut Henri Poincaré – Centre Emile Borel 11 rue Pierre et Marie Curie, 75005 Paris – Telephone : 01 44 27 67 78