

Gaussian fields in Random Matrix Theory

Workshop Mittag-Leffler Institute

June 18 - June 21

Organizers: Maurice Duits and Vadim Gorin

Monday

Breakfast 7.30 - 9.00

9.00-9.40 **Ofer Zeitouni**

The characteristic polynomial of random permutations

9.50 - 10.30 **Elliot Paquette**

Distributional approximation of the characteristic polynomial of a Gaussian beta-ensemble

Coffee-break 10.30 - 11.00

11.00 - 11.40 **Christian Webb**

Multiplicative chaos in random matrix theory and related fields

Lunch: 12.00- 2.30

2.30 - 3.10 **Joseph Najnudel**

On the maximum of the CBE field

3.20 - 4.00 **Tatyana Shcherbina**

Local eigenvalue statistics of random band matrices

Coffee-break 4-4.30

4.30 - 5.10 **Yting Li**
On random Schnyder Wood

Wine and cheese 6—

Tuesday

Breakfast 7.30 - 9.00

9.00-9.40 **Alexey Bufetov**
Fluctuations of random tilings of domains with holes

9.50 - 10.30 **Patrik Ferrari**
Anisotropic (2+1)-d growth and Gaussian limits of q-Whittaker processes

Coffee-break 10.30 - 11.00

11.00 - 11.40 **Sunil Chhita**
A (2+1)-dimensional Anisotropic KPZ growth model with a rigid phase

Lunch: 12.00- 2.30

2.30 - 3.10 **Arno Kuijlaars**
The two-periodic Aztec diamond and matrix valued orthogonal polynomials

3.20 - 4.00 **Christophe Charlier**
Periodic weights for lozenge tilings of hexagons

Coffee-break 4-4.30

4.30 - 5.10 **Tomas Berggren**
Double integral formulas for non-intersecting paths with periodic transition matrices

Wednesday

Breakfast 7.30 - 9.00

9.00-9.40 **Yan Fyodorov**

Freezing Transition in Decaying Burgers Turbulence and Random Matrix Dualities

9.50 - 10.30 **Nick Simm**

Moments of random matrices and Wilson polynomials

Coffee-break 10.30 - 11.00

11.00 - 11.40 **Alexander Bufetov**

Patterson-Sullivan measures for point processes and the reconstruction of harmonic functions

Lunch: 12.00- 2.30

2.30 - 3.10 **Diane Holcomb**

On the centered maximum and linear statistics of the Sine beta process

3.20 - 4.00 **Mykhaylo Shkolnikov**

Edge of spiked beta ensembles, stochastic Airy semigroups and reflected Brownian motions

Coffee-break 4-4.30

4.30 - 5.10 **Tom Claeys**

Critical behavior for Gaussian perturbations of Hermitian matrices

Conference dinner 18:30

Thursday

Breakfast 7.30 - 9.00

9.00-9.40 **Gernot Akemann**

From the circular law to Gauss and beyond: high temperature crossover for 2D Coulomb gases

9.50 - 10.30 **Igor Krasovsky**

Gap probability problems for the sine process.

Coffee-break 10.30 - 11.00

11.00 - 11.40 **Benjamin Fahs**

The probability of 2 gaps in the bulk of the spectrum of random matrices

11.50 - 12.30 **Rostyslav Kozhan**

Relative strong Szegő Theorem and a CLT for unitary RMT ensembles

Lunch: 12.30- 2.30