

XIII Brunel–Bielefeld Workshop on Random Matrix Theory

Center for Interdisciplinary Research – ZiF, Bielefeld University

Organisers: G. Akemann (Bielefeld), I. Krasovsky, D. Savin, I. Smolyarenko (London)

Thursday 14. December 2017:

16:00 – 18:00 REGISTRATION ZiF Hall 1st floor
17:00 onwards POSTER SESSION followed by RECEPTION & BUFFET (from 18:00)

Friday 15. December 2017:

09:30 – 10:15 Francesco Mezzadri *Free Fermions and the Classical Compact Groups*
10:15 – 11:00 Alexander Bufetov *Conditional measures of determinantal point processes*
11:00 – 11:30 COFFEE BREAK
11:30 – 12:15 Hans Weidenmüller *Massive Modes for Quantum Dots*
12:15 – 13:00 Uzy Smilansky *The distribution of delay-times*
13:00 – 15:00 LUNCH BREAK
15:00 – 15:45 Mira Shamis *The Curie-Weiss model at complex temperature*
15:45 – 16:30 Grégory Schehr *Exact extremal statistics in the classical 1d Coulomb gas*
16:30 – 17:00 COFFEE BREAK
17:00 – 17:45 Klaus Frahm *Wikipedia mining of hidden links between political leaders using reduced Google matrix*
17:45 – 18:30 Thomas Guhr *The Correlated Wishart Model: New Results and a New Interpretation*
20:00 CONFERENCE DINNER Wirtshaus 1802 Bültmanns Hof, Kurt-Schumacher-Str. 17A

Saturday 16. December 2017:

09:30 – 10:15 Vadim Gorin *Local limits of Random Sorting Networks*
10:15 – 11:00 Carl Dettmann *Spectral statistics of random geometric graphs*
11:00 – 11:30 COFFEE BREAK
11:30 – 12:15 Pierre Le Doussal *Memory effects in Kardar Parisi Zhang growth: exact results via the replica Bethe ansatz*
12:15 – 13:00 Patrik Ferrari *Universality of the GOE Tracy-Widom distribution for TASEP with arbitrary density*
13:00 – 14:30 LUNCH BREAK
14:30 – 15:15 Arno Kuijlaars *Tiling models and matrix valued orthogonal polynomials*
15:15 – 15:45 COFFEE BREAK
15:45 – 16:30 Mylène Maïda *Concentration for Coulomb gases and Coulomb transport inequalities*
16:30 – 17:15 Izaak Neri *Eigenvalue Outliers of Sparse Non-Hermitian Random matrices*

Poster Presentations:

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| Guisi Alfano | <i>Constrained equilibrium problems for Raney densities: applications to wireless communications</i> |
| Johannes Alt | <i>Local inhomogeneous circular law</i> |
| Christophe Charlier | <i>A periodic weight for the hexagon tiling problem</i> |
| Fabio Deelan Cunden | <i>Universality of the pulled-to-pushed phase transition in systems with repulsive interaction</i> |
| Elba Garcia-Failde | <i>Simple maps, Hurwitz numbers and topological recursion via a matrix model with external field</i> |
| Aurelién Grabsch | <i>Truncated linear statistics of eigenvalues</i> |
| Lakshmi Sai Bhargavi Jonnadula | <i>Entangling Power of Time Evolution Operators and the Role of Local Dynamics</i> |
| Bertrand Lacroix-A-Chez-Toine | <i>Extremes of 2d Coulomb gases</i> |
| Anna Maltsev | <i>Using models of statistical mechanics to understand calcium signals in heart cells</i> |
| Adam Mielke | <i>Transition between the Gaussian chiral orthogonal and antisymmetric Hermitian ensemble</i> |
| Leslie Molag | <i>A Riemann-Hilbert approach to the Mattalib-Borodin Ensemble</i> |
| Mihail Poplavskyi | <i>On finite rank perturbations for GUE</i> |
| Martin Richter | <i>Microwave communications modeled by a simple mode on a chaotic background</i> |
| Roman Riser | <i>Power Spectrum and Zeros of Riemann Zeta function</i> |
| Wojciech Tarnowski | <i>Probing non-orthogonality of eigenvectors in non-Hermitian models</i> |
| Christophe Texier | <i>Time delay matrix for weakly coupled chaotic cavities</i> |
| Tim Robert Würfel | <i>Symmetry classification of discretized Dirac operators using Random Matrix Theory</i> |