

## 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:

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>