## IX Brunel–Bielefeld Workshop on Random Matrix Theory

Center for Interdisciplinary Research – ZIF, Bielefeld University

Convenors: G. Akemann, F. Götze (Bielefeld), I. Krasovsky (Imperial), D. Savin and I. Smolyarenko (Brunel)

### Tuesday 17. December 2013:

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
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<tbody>
<tr>
<td>16:00 – 18:00</td>
<td>REGISTRATION</td>
<td>ZIF Hall 1st floor</td>
</tr>
<tr>
<td>17:00 onwards</td>
<td>POSTER SESSION followed by RECEPTION &amp; BUFFET (from 18:00)</td>
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### Wednesday 18. December 2013:

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Title</th>
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<tbody>
<tr>
<td>09:30 – 10:15</td>
<td>Jon Keating</td>
<td>RMT and Quantum Spin Chains</td>
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<tr>
<td>10:15 – 11:00</td>
<td>Vladimir Kravtsov</td>
<td>Eigenfunction Statistics on the Bethe Lattice</td>
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<tr>
<td>11:00 – 11:30</td>
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<td>COFFEE BREAK</td>
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<tr>
<td>11:30 – 12:15</td>
<td>Alexander Soshnikov</td>
<td>On CLT results for linear statistics of the eigenvalues in random matrices</td>
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<tr>
<td>12:15 – 13:00</td>
<td>Maurice Duits</td>
<td>On mesoscopic equilibrium for linear statistics in Dyson’s Brownian Motion</td>
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<tr>
<td>13:00 – 15:00</td>
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<td>LUNCH BREAK</td>
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<tr>
<td>15:00 – 15:45</td>
<td>Florent Benaych-Georges</td>
<td>Central limit theorem for heavy tailed random matrices</td>
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<tr>
<td>15:45 – 16:30</td>
<td>Patrik Ferrari</td>
<td>Perturbed GUE Minor Process and Warren’s Process with Drifts</td>
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<tr>
<td>16:30 – 17:00</td>
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<td>COFFEE BREAK</td>
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<tr>
<td>17:00 – 17:45</td>
<td>Pedro Vidal</td>
<td>Quantum transport in chaotic cavities with non-ideal leads for the $\beta = 1, 2$ and 4 symmetry classes</td>
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<tr>
<td>17:45 – 18:30</td>
<td>Christophe Texier</td>
<td>Wigner time-delay distribution in chaotic cavities and freezing transition</td>
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<tr>
<td>20:00 onwards</td>
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<td>CONFERENCE DINNER Sparrenburg</td>
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### Thursday 19. December 2013:

<table>
<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>09:30 – 10:15</td>
<td>Leonid Pastur</td>
<td>On random matrices which include tensor products</td>
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<tr>
<td>10:15 – 11:00</td>
<td>Neil O’Connell</td>
<td>Geometric RSK and Whittaker functions</td>
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<tr>
<td>11:00 – 11:30</td>
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<td>COFFEE BREAK</td>
</tr>
<tr>
<td>11:30 – 12:15</td>
<td>Mireille Capitaine</td>
<td>Exact separation phenomenon for the eigenvalues of large Information-Plus-Noise type matrices - Application to spiked models</td>
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<tr>
<td>12:15 – 13:00</td>
<td>Martin Venker</td>
<td>Repulsive Particle Systems and Random Matrices</td>
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<tr>
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<td>LUNCH BREAK</td>
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<tr>
<td>14:30 – 15:15</td>
<td>Santosh Kumar</td>
<td>Distribution of Scattering Matrix Elements in Quantum Chaotic Scattering</td>
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<td>15:15 – 15:45</td>
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<td>COFFEE BREAK</td>
</tr>
<tr>
<td>15:45 – 16:30</td>
<td>Oleg Zaboronski</td>
<td>Interacting particle systems and the real Ginibre ensemble</td>
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<tr>
<td>16:30 – 17:15</td>
<td>Arno Kuijlaars</td>
<td>Singular Values of Products of Random Matrices</td>
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**Poster Presentations:**

Yasar Atas  
*Ratio of level spacings in random matrix ensembles*

Mohamed Jalel Atia  
*Simplification of Christoffel - Darboux formula in some case of Jacobi polynomials*

Barnaby Garrod  
*Pfaffian Point Processes*

Joanna Hutchinson  
*RMT and Universality of Phase Transitions in Classical Spin Systems*

Jesper Ipsen  
*Singular Values of Products of Various Random Matrices*

Rostyslav Kozhan  
*Truncations of random unitary matrices and universality-type result for subunitary operators*

Irfan Mahmood  
*Lax pair representation and Darboux transformation for noncommutative Painlevé II equation*

Anna Maltsev  
*Fluctuations in the Wigner ensemble*

Rupert Small  
*Particle Maps and k-Body RMT Statistics*

Mihail Poplavskyi  
*Universality in the bulk and at the edge for Unitary Matrix Models*

Vladimir Osipov  
*Universality in the spectrum of strongly opened quantum graphs*

Martin Venker  
*Repulsive Particle Systems and Random Matrices*

Lu Wei  
*On cumulants of trace of products of random matrices*

Tim Wirtz  
*Universality of the Smallest Eigenvalue Distribution in the Correlated Wishart Model*

Zhong Zheng  
*On the fluctuation of mutual information in double scattering MIMO channels*