

# Program BRUNEL Workshop on Random Matrix Theory

Halsbury Building (Graduate School) PH 055, Uxbridge Campus

## Friday 4 November:

09:40 – 10:00		<i>registration</i>
10:00 – 11:00	Martin Sieber	Semiclassical Approach to Universality in Quantum Chaos
11:00 – 11:30		<i>coffee break</i>
11:30 – 12:30	Steve Simon	Unexpected Physics of Wireless Communication : Replicas, Diffusons, and Supersymmetry for Fun and Profit
12:30 – 14:00		<i>lunch break</i>
14:00 – 14:35	Jon Keating	Random matrix theory and entanglement in quantum spin chain
14:35 – 15:10	Ben Simons	Instantons and geodesics on $\sigma$ -manifolds: roads to localisation
15:10 – 15:30		<i>coffee break</i>
15:30 – 16:30	Thomas Guhr	Measuring and Removing Noise in Financial Correlations
16:30 – 16:50		<i>coffee break</i>
16:50 – 17:25	Ilya Krasikov	Sharp nonasymptotic bounds on orthogonal polynomials
17:25 – 18:00	Boris Khoruzhenko	Moments of spectral determinants of complex random matrices
18:00 – 19:00	Poster session & wine	
20:00	dinner	PizzaExpress, 222 High St, Uxbridge, tel. 01895 251222

## Saturday 5 November:

10:00 – 11:00	Herbert Spohn	Two links between RMT and statistical physics
11:00 – 11:30		<i>coffee break</i>
11:30 – 12:05	Francesco Mezzadri	Random polynomials, random matrices, and $L$ -functions
12:05 – 12:40	Eugene Kanzieper	Integrable structure of Ginibre's ensemble of real random matrices and statistics of real eigenvalues
12:40 – 13:55		<i>lunch break</i>
13:55 – 14:30	Tilo Wettig	Color-flavor transformation and application to lattice QCD
14:30 – 15:05	Nina Snaith	Averages of ratios of characteristic polynomials for the compact classical groups
15:05 – 15:40	Gregor Tanner	Spectral statistics for 'regular quantum graphs'
15:40 – 16:00		<i>coffee break</i>
16:00 – 16:35	Oriol Bohigas	On a new family of random matrices
16:35 – 17:10	Yan Fyodorov	On Hubbard-Stratonovich Transformations over Hyperbolic Domains

### Poster Presentations:

- Francesco Basile    Characteristic polynomials in non-Hermitian symplectic ensembles
- Güler Ergün        Spectral Properties of Random Matrices and Applications to Biological Systems
- Dmitry Gangardt   Off-diagonal correlations of 1D impenetrable bosons: RMT and replica trick
- Heiner Kohler     Fidelity decay of random matrix ensembles