

# V BRUNEL Workshop on Random Matrix Theory

Halsbury Building (Graduate School) Room PH 055

## Friday 18. December:

09:15 – 09:45		registration
09:45 – 10:30	Alex Altland	<i>Field theory of dynamical localisation in the quantum kicked rotor</i>
10:30 – 11:15	Mario Kieburg	<i>Supersymmetry without supersymmetry: a new approach to derive determinantal and Pfaffian structures</i>
11:15 – 11:45		coffee break
11:45 – 12:30	Arno Kuijlaars	<i>Asymptotic analysis of recurrence relations in certain random matrix models</i>
12:30 – 14:15		lunch break
14:15 – 15:00	Fabio Franchini	<i>Horizon in RMT, Hawking radiation and flow of cold atoms</i>
15:00 – 15:45	Oriol Bohigas	<i>Random-matrix approach to RPA equations</i>
15:45 – 16:15		coffee break
16:15 – 17:00	Henning Schomerus	<i>Fractal Weyl laws – beyond ballistic chaotic decay</i>
17:00 – 17:45	Oleg Yevtushenko	<i>Critical scaling in random matrices with fractal eigenstates</i>
17:45 – 19:30	POSTER SESSION	
20:00	DINNER	<i>Auberge, 223 High St, Uxbridge, tel. 01895 270111</i>

## Saturday 19. December:

09:30 – 10:15	Benjamin Schlein	<i>Bulk universality for Wigner matrices</i>
10:15 – 11:00	Tom Claeys	<i>Critical asymptotics for Toeplitz determinants</i>
11:00 – 11:30		coffee break
11:30 – 12:15	Yan Fyodorov	<i>Extreme value statistics of 1/f noises generated by 2D Gaussian free fields: Statistical mechanics approach</i>
12:15 – 13:00	Sven Gnutzmann	<i>The nonlinear Schrödinger equation on quantum graphs</i>
13:00 – 14:30		lunch break
14:30 – 15:15	Zdzisław Burda	<i>Product of random Gaussian matrices</i>
15:15 – 15:45		coffee break
15:45 – 16:30	Francesco Mezzadri	<i>On the rate of convergence of linear functions of matrix elements of random unitary matrices</i>
16:30 – 17:15	Boris Khoruzhenko	<i>Truncations of random unitary matrices revisited</i>

## Poster Presentations:

- Gaetan Borot      *The topological recursion and the  $O(n)$  matrix model*
- Andrzej Jarosz      *Applications of free random variables to financial analysis*
- Dmitrii Maksimov      *Random waves in elastic medium*
- Rodrigo Megaidés      *Spectral statistics on the complete Neumann graph: symmetries and universality*
- Celine Nadal      *Bipartite entanglement for random pure states and Wishart random matrices*
- Leonardo Pachón      *Time-domain scars: Resolving the spectral form factor in phase space*
- Michael Phillips      *The chiral Gaussian two-matrix ensemble of real asymmetric matrices*
- Sean O'Rourke      *Gaussian fluctuations of eigenvalues in Wigner random matrices*
- Joachim Rambeau      *Statistics of the maximal value for non-intersecting Brownian paths*
- Tim Rogers      *Universal sum and product rules for random matrices*
- Nick Simm      *Quantum transport and gap formation in RMT: Shot noise and conductance*
- Suren Sorathia      *Interplay between coupling to the continuum and internal chaos: Fluctuations and correlations*
- Navinder Singh      *Eigenvalue statistics and its asymptotic analysis for non-Hermitian Wishart random matrices*
- Pierpaolo Vivo      *How many eigenvalues of a Gaussian matrix are positive?*