

X Brunel–Bielefeld Workshop on Random Matrix Theory

Brunel University London – Hamilton Centre

Organisers: G. Akemann (Bielefeld), I. Krasovsky (Imperial), D. Savin and I. Smolyarenko (Brunel), O. Zeitouni (Warwick)

Friday, 12 December 2014:

08:45 – 09:30		REGISTRATION	Newton's room
09:30 – 10:10	Yan Fyodorov	<i>Topology (de)trivialization transition in high-dimensional random fields and landscapes</i>	
10:10 – 10:50	Neil O'Connell	<i>Stochastic Backlund transformations</i>	
10:50 – 11:20		COFFEE BREAK	
11:20 – 12:00	Reimer Kühn	<i>Spectra of large random stochastic matrices and relaxation in complex systems</i>	
12:00 – 12:40	Tiago Peixoto	<i>Eigenvalue spectra of modular networks</i>	
12:40 – 14:30		LUNCH BREAK	
14:30 – 15:10	Marcel Novaes	<i>Semiclassical approximation to quantum chaos as a matrix model</i>	
15:10 – 15:50	Sebastian Müller	<i>GSE statistics without spin</i>	
15:50 – 16:20		COFFEE BREAK	
16:20 – 17:00	Alexander Bufetov	TBA	
17:00 – 19:00		POSTER SESSION & RECEPTION	Newton's room
19:30	DINNER	<i>Zizzi, 223 High St, Uxbridge, tel. 01895 233100</i>	

Saturday, 13 December 2014:

09:20 – 10:00	Clare Dunning	<i>From classical to quantum integrable systems</i>	
10:00 – 10:40	Marta Mazzocco	<i>Confluence of the Painleve equations, Cherednik algebras and q-Askey scheme</i>	
10:40 – 11:10		COFFEE BREAK	
11:10 – 11:50	Karol Życzkowski	<i>Random density matrices and convolutions of Marchenko-Pastur distribution</i>	
11:50 – 12:30	Mario Kieburg	<i>Level statistics of the correlated and uncorrelated Wishart ensemble</i>	
12:30 – 14:00		LUNCH BREAK	
14:00 – 14:40	Maciej Nowak	<i>Spectral shock waves and spectral viscosity in dynamic random matrix models</i>	
14:40 – 15:20	Roger Tribe	<i>Space time correlations for real Ginibre evolution</i>	
15:20 – 15:50		COFFEE BREAK	
15:50 – 16:30	Ralf Müller	<i>On the optimum asymptotic multiuser efficiency of randomly spread CDMA in logarithmically infinite overload</i>	

Poster Presentations:

Newton's room

Perret Anthony	<i>Near-extreme eigenvalues and the first gap of Hermitian random matrices</i>
Christophe Charlier	<i>Asymptotics for Toeplitz determinants: perturbation of symbols with a gap</i>
Fabio Cunden	<i>Universal covariance formula for linear statistics on random matrices</i>
Benjamin Fahs	<i>Universality for eigenvalue correlations in a double scaling limit at the origin of the spectrum</i>
Fabio Franchini	<i>Spontaneous breaking of $U(N)$ symmetry in invariant matrix models</i>
Barnaby Garrod	<i>Annihilating Brownian motions and the edge of the real Ginibre ensemble</i>
Jesper Ipsen	<i>Asymptotic properties for products of a large number of Ginibre matrices</i>
Indrajit Jana	<i>Fluctuations of linear eigenvalue statistics of random band matrices</i>
Chris Joyner	<i>A discrete random walk approach to spectral statistics in Bernoulli matrix ensembles</i>
Anna Maltsev	<i>Linear spectral statistics for half-heavy-tailed Wigner matrices</i>
Ricardo Marino	<i>Phase transitions and edge scaling of number variance in Gaussian random matrices</i>
Thorsten Neuschel	<i>Jacobi polynomial moments and products of random matrices</i>
Benjamin Niedner	<i>Wronskians and duality of Cardy branes</i>
André Nock	<i>On GOE characteristic polynomials with half-integer powers</i>
Yuchen Pei	<i>The Catalan numbers and the quantum stochastic Lévy area</i>
Alexi Reynolds	<i>Moments of β-ensembles</i>
Roman Riser	<i>Fine asymptotics in a random normal matrix ensemble</i>
Dries Stivigny	<i>Products with truncated unitary matrices</i>
Artur Świech	<i>Local level statistics – free probability meets supersymmetry</i>
Christophe Texier	<i>Joint distribution of two linear statistics in the Laguerre ensemble</i>
Daniel Waltner	<i>Eigenvalue distribution in the doubly correlated Wishart ensemble</i>
Christian Webb	<i>The characteristic polynomial of CUE and Gaussian multiplicative chaos</i>
Lu Wei	<i>Sphere packing bounds and restricted partition functions</i>
Tim Wirtz	<i>From a non-invariant correlated Wishart model to an invariant Hermitian matrix model</i>