XII 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)

Friday, 09 December 2016:

08:45 – 09:30	REGISTRATION		Newton Room
09:30 – 10:10	Nina Snaith	*Unearthing random matrix theory in the statistics of L-functions: the story of Beauty and the Beast*	
10:10 – 10:50	Boris Khoruzhenko	*How many stable equilibria will a large complex system have?*	
10:50 – 11:20	COFFEE BREAK		
11:20 – 12:00	Alice Guionnet	*Discrete Beta ensembles*	
12:00 – 12:40	Gaultier Lambert	*Transition from random matrix to Poisson statistics*	
12:40 – 14:30	LUNCH BREAK		
14:30 – 15:10	Romain Couillet	*A random matrix approach to machine learning*	
15:10 – 15:50	Aris Moustakas	*Applications of random matrix theory on optical communications*	
15:50 – 16:20	COFFEE BREAK		
16:20 – 17:00	Anna Maltsev	*Density and spacings for the energy levels of quadratic Fermi operators*	
17:00 – 19:00	POSTER SESSION & RECEPTION		Newton Room
19:30	DINNER	*Zizzi, 223 High St, Uxbridge, tel. 01895 233100*	

Saturday, 10 December 2016:

09:20 – 10:00	Fabio Cunden	*Time-delay matrix in ballistic chaotic cavities: new results and a conjecture*
10:00 – 10:40	Benjamin Fahs	*A transition in gap probabilities - from 1 gap to 2 gaps in the bulk*
10:40 – 11:10	COFFEE BREAK	
11:10 – 11:50	Eugene Bogomolny	*Modification of the Porter-Thomas distribution by rank-one interaction*
11:50 – 12:30	Alexander Ossipov	*Statistics of eigenvectors in the deformed Gaussian unitary ensemble of random matrices*
12:30 – 14:00	LUNCH BREAK	
14:00 – 14:40	Oleg Zaboronski	*A universality class for edge statistics associated with non-Hermitean random matrices*
14:40 – 15:20	Martin Venker	*The limit of weak non-Hermiticity revisited: Beyond the elliptic ensemble*
15:20 – 15:50	COFFEE BREAK	
15:50 – 16:30	Holger Koesters	*Polynomial ensembles of derivative type*

Poster Presentations: Newton Room

Giusi Alfano	*Rayleigh quotients in random matrices: closed-form statistics*
Paolo Barucca	*Spectral partitioning in random regular blockmodels*
Tomasz Checinski	*Sum of two complex correlated Wishart matrices*
Matthew Davis	*Pollicott resonaces and quantum chaos*
Alfredo Deano-Cabrera	*On the probability of positive-definiteness in the gGUE via semi-classical Laguerre polynomials*
Antoine Doeraene	*Statistics of GUE eigenvalues near the edges*
Rouhollah Ebrahimi	*Extreme value statistics of normal random matrices*
David Facoetti	*From non-ergodic eigenvectors to local resolvent statistics and back: a random matrix perspective*
Thomas Gorin	*Overlap statistics for mixed states of finite dimensional quantum systems*
Aurélien Grabsch	*Truncated linear statistics associated with the top eigenvalues of random matrices*
Indrajit Jana	*ESD of singular values of random band matrices; Marchenko-Pastur law and more*
Ulrich Kuhl	*Microwave realisation of the Gaussian Symplectic Ensemble*
Bertrand Lacroix	*Fermions in a box and random matrix theory*
Adam Mielke	*Universal distribution of would-be topological zero modes in coupled chiral systems*
Steve Mudute-Ndumbe	*A new type of PT-symmetric random matrix ensemble and PT-symmetric quantum chaos*
Sebastian Muller	*Spectral statistics of chaotic many-body systems*
Pavel Nikitin	*Symplectic invariant random matrices and point processes*
Martin Richter	*Direct processes in effective Hamiltonians to mimic microwave communications in noisy environments*
Nick Simm	*Log-normal multiplicative chaos and random matrix theory*
Marco Stevens	*The semi-circle law in algebraic random matrix theory*
Wojciech Tarnowski	*RMT benchmark for spectra of delayed correlation matrices*
Christophe Texier	*Wigner time delay distribution in multichannel disordered wires*
Duy Khanh Trinh	*Some results on Gaussian beta ensembles at high temperature*
Kevin Truong	*Statistics of eigenvectors in non-invariant random matrix ensembles*
Mo-Dick Wong	*Random Hermitian matrices and Gaussian multiplicative chaos*