

## "The Lush World of Random Matrices", Zif, Bielefeld, Sep-Dec 2025

Workshop 2: Random Matrix Theory for Ecology, Economics, Finance and Statistical Physics					
	Monday 27/10	Tuesday 28/10	Wednesday 29/10	Thursday 30/10	Friday 31/10
9-9:45	<b>Satya Majumdar</b> <i>Resetting Dyson Brownian Motion</i>	<b>Jorge Kurchan</b> <i>From random matrices to eigenstate thermalization</i>	<b>Gernot Akemann</b> <i>Non-Hermitian random matrix symmetry classes and <math>\beta</math>-ensembles</i>	<b>Alice Guionnet</b> <i>Large deviations for structured Gaussian matrices</i>	<b>Joseph Baron</b> <i>Perturbative approaches in random matrix theory</i>
9:45-10:30	<b>Thibaut Arnoulx de Pirey</b> <i>Transitions driven by multibody interactions in an effective model of active matter</i>	<b>Giorgio Cipolloni</b> <i>Universality of the spectral form factor</i>	<b>Yan V. Fyodorov</b> <i>Eigenvector ergodization in non-Hermitian RMT: two exactly solvable cases</i>	<b>Alexander K. Hartmann</b> <i>Large-deviation simulations for random matrices</i>	<b>Fabian Aguirre-Lopez</b> <i>Mean-field approaches for complex systems with network structure</i>
10: 30-11:00	Coffee break				
11:00-11:45	<b>Giulia Garcia Lorenzana</b> <i>Interactions and migration rescuing ecological diversity</i>	<b>Zdzislaw Burda</b> <i>How long will the richest remain the richest?</i>	<b>Reimer Kuehn</b> <i>On Sample Auto-Covariance Matrices</i>	<b>Giuseppe Del Vecchio Del Vecchio</b> <i>Trapped fermions and hole probabilities</i>	<b>Nirbhay Patil</b> <i>Block Structured Ginibre Matrices - Eigenvalue Spectra, Applications, and other Curiosities</i>
11:45-12:30	<b>Mylene Maida</b> <i>2d Yang-Mills theory on the torus : stochastic, combinatorial and topological aspects</i>	<b>Thomas Guhr</b> <i>Random Matrices and Multivariate Distributions in Correlated, Non-Stationary Complex Systems</i>	<b>Gregory Schehr</b> <i>Large Deviations in Switching Diffusion: from Free Cumulants to Dynamical Transitions</i>	<b>Pierre Le Doussal</b> <i>A mean-field theory for heterogeneous random growth with redistribution</i>	
12:30 -14:30	Lunch at Zif				
14:30:15:15	<b>Jamal Najim</b> <i>Statistical properties of Equilibria in large Lotka-Volterra systems of ODE coupled by large random matrices</i>	<b>Vadim Gorin</b> <i>How weak are weak factors? Uniform inference for signal strength in signal plus noise models</i>	Poster talks (14:30-15:30)  <b>Liza Schonlau</b> <b>Juan José Ochoa</b>	<b>Lucas Benigni</b> <i>Eigenvalue distribution of the Neural Tangent Kernel under a quadratic scaling</i>	
15:15-16:00	<b>Tobias Galla</b> <i>Dynamics of random Lotka-Volterra systems</i>	<b>Bhargavi Srinivasan</b> <i>Intrinsic Geometry of the Stock Market from Graph Ricci Flow</i>	Free discussion	<b>Elizaveta Safonova</b> <i>Density of states correlations in Lévy Rosenzweig-Porter model via supersymmetry approach</i>	
16:00-18:00	Free discussion				
18:15-19:30	<b>Public Lecture: Herbert Dawid</b> <i>The effect of algorithmic decision making in markets</i>				
19:30-	Dinner at Zif		Conference dinner		