



Mathematics and CS Seminar

Eigenvectors of integrable models of non-Hermitian random matrices

Guillaume Dubach (CIMS, New York University)

Host: László Erdős

Right and left eigenvectors of non-Hermitian matrices form a bi-orthogonal system, to which one can associate homogeneous quantities known as overlaps. The matrix of overlaps quantifies the stability of the spectrum, and characterizes the joint eigenvalues increments under Dyson-type dynamics. Overlaps first appeared in the physics literature: Chalker and Mehlig calculated their conditional expectation for complex Ginibre matrices (1998). For the same model, we extend their results by deriving the distribution of the overlaps and their correlations (joint work with P. Bourgade). Similar results hold for quaternionic Gaussian matrices, as well as matrices from the spherical and truncated unitary ensembles.

Tuesday, August 20, 2019 10:00am - 12:00pm

IST Austria Campus Heinzl Seminar Room / Office Bldg West (I21.EG.101)



This invitation is valid as a ticket for the IST Shuttle from and to Heiligenstadt Station. Please find a schedule of the IST Shuttle on our webpage: <https://ist.ac.at/en/campus/how-to-get-here/> The IST Shuttle bus is marked IST Shuttle (#142) and has the Institute Logo printed on the side.