IST AUSTRIA
Institute of Science and Technology

Invitation to Seminar Talk

About some local properties of the products of independent square non-hermitian random matrices with independent entries

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We consider products of independent square non-Hermitian random matrices. More precisely, let X(1),...,X(m) be independent square random matrices of size N with iid entries with zero mean and variance 1/N. Soshnikov and O'Rourke showed that the empirical spectral distribution of the product X(1)X(2)..X(m) converges to the m-th power of the circular law.

We prove that if the entries of the matrices X(1),...,X(m) satisfy uniform subexponential decay condition, then in the bulk the convergence of the ESD holds up to the optimal scale. We also show that the spectral radius of X(1)X(2)..X(m) converges to 1 almost surely as N tends to infinity.

Thursday, 26 February 2015, 4:30pm

Mondi2, Central Building, 1st floor

2015-02-26

This invitation is valid as a ticket for the IST Shuttle from and to Heiligenstadt Station.
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http://ist.ac.at/fileadmin/user_upload/pdfs/IST_shuttle_bus.pdf
The IST Shuttle bus is marked IST Shuttle and has the Institute Logo printed on the side.