Seminar/Talk

On the operator norm of a random matrix with a polynomially decaying metric correlation structure

Jana Reker

IST Austria

Host: Laszlo Erdös

In this talk, we consider a $N\times N$ Hermitian random matrix with a polynomially decaying metric correlation structure. Trivial a priori bound shows that the operator norm of this model is stochastically dominated by $\sqrt{N}$. However, by calculating the trace of the moments of the matrix and using the summable decay of the cumulants, the estimate on the norm can be improved to a bound of order one. This is a rotation project with László Erdös.

Thursday, January 21, 2021 04:15pm - 05:15pm

online via Zoom