



## Mathematics and CS Seminar

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

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Host: Laszlo Erdős

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 Erdős.

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

online via Zoom



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