



INDIAN STATISTICAL INSTITUTE
Theoretical Statistics and Mathematics Unit, Kolkata

LECTURE

Date: January 31, 2023, Tuesday

Time: 01:30 PM

VENUE:

L-1

(3rd Floor, A.N. Kolmogorov Bhavan), ISI Kolkata

TITLE:

Applications of Random Matrix Theory

SPEAKER:

Anvit Garg

ISI Kolkata

ABSTRACT:

We first introduce some concepts from Random Matrix Theory.

Pastur found the limiting distribution $\mathcal{L}(S_n^{-1} S_n^{\text{top}} K_n X_n S_n)$ under some conditions.

We prove that Pastur's result holds with weakened conditions. We further explore Pastur's proof from different angles and the relationship between the "diamond" operation defined by him and free multiplicative convolution.

ALL ARE CORDIALLY INVITED