



INDIAN STATISTICAL INSTITUTE

Theoretical Statistics and Mathematics Unit, Kolkata

Number Theory Seminar

Date: April 10, 2024

Time: 02:15 PM

VENUE:

L-infinity

(5th Floor, A.N. Kolmogorov Bhavan), ISI Kolkata

TITLE:

Bounds for Fourier Coefficients of Modular Forms

SPEAKER:

Mayukh Dasharatharaman

Stat-Math Unit, ISI Kolkata

ABSTRACT:

We show that for a set of density 1, the Fourier coefficients of a fixed (non-CM) modular form is smaller than $(\log n)^{-1/2+\epsilon}$. The proof is due to Luca-Radziwiłł-Shparlinski. At the time of publication, this was conditional on the automorphy of all symmetric powers, which is now known due to Newton-Thorne. We also present a refinement due to Kim.

ALL ARE CORDIALLY INVITED