Theoretical Statistics and Mathematics Unit, Kolkata
INDIAN STATISTICAL INSTITUTE

Thesis Proposal Seminar

Date: June 12, 2025
Time: 6:30 PM

MODE: Online

Join Zoom Meeting
https://us05web.zoom.us/j/84916294121?pwd=Z9aVAUuaVNg3bbL7ZcaoJ6dAwl26dO.1

Meeting ID: 849 1629 4121
Passcode: 8GA3py

TITLE:

Sign Changes of Hecke Eigenvalues

SPEAKER:

Ujjwal Kumar Sana
Stat-Math Unit, ISI Kolkata

ABSTRACT:

Let f be a Normalized Hecke eigen-cuspform of weight k for $\Gamma_0(N)$. We would like to investigate the first sign change to $\lambda(n)$ for (n,N)=1. Here $\lambda(n)$ are the hecke eigenvalues of f.

Theorem

There exist n_f such that $\lambda(n_f) < 0$ for:

$$n_f << Q^{1/2-\delta}, \delta > 0 \quad (1)$$

where $Q = k^2N$ the arithmetic conductor of L(f,s)

ALL ARE CORDIALLY INVITED