



## Theoretical Statistics and Mathematics Unit

Indian Statistical Institute

203 B.T. Road, Kolkata - 700108

### Thesis Proposal Seminar

**Date:** June 25, 2026

**Time:** 03:15 PM

**VENUE:**

L-2, 4<sup>th</sup> Floor, A.N. Kolmogorov Bhavan, ISI Kolkata

**SPEAKER:**

**Nabarun Dutta**

Stat-Math Unit, ISI Kolkata

**TITLE:**

**First Moment of Quadratic Twisted Modular L-Function over  
Moduli  $p+k^2$**

**ABSTRACT:**

*Moments of quadratic twists of modular L-functions have a long and rich history of study in analytic number theory. In this talk, we will seek to obtain an asymptotic for the first moment of modular L-functions associated with holomorphic Hecke eigencuspforms of weight  $\kappa$ , level 1, twisted by quadratic characters whose moduli are representable as a sum of a prime and a square, namely  $p+k^2$ , where  $p$  is a prime and  $k$  is a positive integer. Our approach relies on the asymptotic formula for the number of representations of a non-square positive integer as a sum of a prime and a square, proved by Mieh (1968) following a conjecture of Hardy and Littlewood (1923).*

**ALL ARE CORDIALLY INVITED**

**[Click here for More Seminar Information](#)**