



**Theoretical Statistics and Mathematics Unit, Kolkata**  
**INDIAN STATISTICAL INSTITUTE**

**SEMINAR**

Date: June 10, 2025  
Time: 03:00 PM

**VENUE:**

**L- 2**

(4<sup>th</sup> Floor, A.N. Kolmogorov Bhavan), ISI Kolkata

**TITLE:**

**MASS EQUIDISTRIBUTION FOR HECKE EIGENFORMS**

**SPEAKER:**

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Stat-Math Unit, ISI Kolkata

**ABSTRACT:**

The Quantum Ergodicity Conjecture(QUE), proposed by Rudnick and Sarnak, conjectures that high energy eigenfunctions of the Laplacian on certain negatively curved Riemannian manifolds become equidistributed. A particular case is  $SL(2, \mathbb{Z}) \backslash \mathbb{H}$ . We will discuss the papers by R. Holowinsky and K.Soundararajan, where, both their methods combine to completely prove the holomorphic analogue of QUE for  $SL(2, \mathbb{Z}) \backslash \mathbb{H}$ , (i.e. Mass of large Eigenvalue Hecke Eigenforms become equidistributed) using Analytic Number Theoretic techniques.

**ALL ARE CORDIALLY INVITED**