Theoretical Statistics and Mathematics Unit

Indian Statistical Institute

203 B.T. Road, Kolkata - 700108

SEMINAR

Date: November 23, 2026
Time: 04:15 PM

VENUE:

L-Infinity, 5th Floor, A.N. Kolmogorov Bhavan, ISI Kolkata

SPEAKER:

Jens Marklof

School of Mathematics, University of Bristol and INSA Overseas Chair

TITLE:

Mathematical Models of Quantum Chaos

ABSTRACT:

I will report on recent progress on influential conjectures from the 1970s and 1980s (Berry-Tabor, Bohigas-Giannoni-Schmit), which suggest that the spectral statistics of the Laplace-Beltrami operator on a given compact Riemannian manifold should be described either by a Poisson point process or by a random matrix ensemble, depending on whether the geodesic flow is integrable or "chaotic". This talk will straddle aspects of analysis, geometry, probability, number theory and ergodic theory, and should be accessible to a broad audience. The two most recent results presented in this lecture were obtained in collaboration with Laura Monk and with Wooyeon Kim and Matthew Welsh.

Stat Math Unit, ISI Kolkata

ALL ARE CORDIALLY INVITED

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