Theoretical Statistics and Mathematics Unit, Kolkata
INDIAN STATISTICAL INSTITUTE

Thesis Defence Seminar

Date: October 29, 2025
Time: 03:00 PM

MODE: Online

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Meeting ID: 914 4953 1060
Passcode: 512353

TITLE:

Restricted Mean Value Property on Riemannian Manifolds and Carleson's problem on Damek-Ricci spaces

SPEAKER:

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ABSTRACT:

In this talk, we will discuss some aspects of boundary behavior of solutions of certain PDEs on some suitable classes of Riemannian manifolds. We first see some local (for general Riemannian manifolds) and global (for Hadamard manifolds of pinched negative curvature) results in terms of boundary behavior of continuous, bounded functions satisfying the restricted mean value property so that they can be concluded to be harmonic. Next, we address the Carleson's problem of determining the optimal regularity of the initial data for the pointwise convergence of its Schrodinger propagation and the well-posedness of the initial value problem in the setting of Damek-Ricci spaces by seeing both local and global mapping properties of the Schrödinger maximal function. We also consider generalization of the Carleson's problem by looking at convergence along more general approach paths.

ALL ARE CORDIALLY INVITED