

गणित विभाग

DEPARTMENT OF MATHEMATICS

दिल्लीविश्वविद्यालय, दिल्ली-10007 UNIVERSITY OF DELHI, DELHI – 110007

Cordially invites you to an Invited talk as per following details

Day and Date : Monday, December 02, 2024

Time : 12:00 (noon)

Venue : Room No. - 05 (Ground Floor)

Satyakam Bhawan

Department of Mathematics University of Delhi - 110007

Title : The Hardy--Littlewood Maximal Theorem beyond

Euclidean Spaces

Speaker: Dr. Pratyoosh Kumar

Affiliation : Department of Mathematics

Indian Institute of Technology Guwahati

Guwahati, Assam

Abstract : One of the objectives of this talk is to formulate and

prove the fundamental theorem of calculus in a more general setting. The Hardy-Littlewood maximal theorem plays a pivotal role in harmonic analysis, providing essential bounds for maximal functions in Euclidean spaces. These bounds serve as the foundation for the Lebesgue differentiation theorem, which guarantees the almost everywhere convergence for certain integral averages. In this presentation, we will discuss the Hardy-Littlewood maximal theorem non-Euclidean to including metric measure spaces, Riemannian

manifolds, and spaces of homogeneous type.

Department of Mathematics