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Joint Geometric Analysis Seminar

(Part of MIST program)

Bandwidth and focal radius with positive isotropic curvature

Dr. Tsz-Kiu Aaron, Chow
Massachusetts Institute of Technology

Abstract

This talk investigates new quantitative metric inequalities for manifolds with positive isotropic curvature (PIC). Specifically, we establish upper bounds on the bandwidth and focal radius of hypersurfaces in PIC manifolds, contingent on boundary convexities and Betti numbers. The proof is based on exploiting the spectral properties of a twisted de Rham-Hodge operator on manifolds with boundary. This is a joint work with Jingze Zhu.

Date: 14 Aug 2024
Time: 10:30 am-11:30 am
Venue: Room 501a, AB1

All are Welcome