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Joint Geometric Analysis Seminar

(Part of MIST program)

Entropy bounds, Compactness and Finiteness Theorems for Embedded self-shrinkers with rotational symmetry

Dr. John Man-shun Ma
University of Copenhagen

Abstract

In this talk, we study the space of complete embedded rotationally symmetric self-shrinking hypersurfaces in \mathbb{R}^{n+1} . First, using comparison geometry in the context of metric geometry, we derive explicit upper bounds for the entropy of all such self-shrinkers. Second, as an application we prove a smooth compactness theorem on the space of all such shrinkers. We also prove that there are only finitely many such self-shrinkers with an extra reflection symmetry. This is a joint work with A. Muhammad and N. M. Møller.

Date: November 18, 2022 (Friday)
Time: 3:00pm-4:00pm (Hong Kong time)
ZOOM link: <https://cuhk.zoom.us/j/91805734715>

All are Welcome