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Joint Geometric Analysis Seminar

(Part of MIST program)

Existence of four minimal spheres in S^3 with a bumpy metric

Prof. Zhichao Wang
Shanghai Center for Mathematical Sciences, Fudan University

Abstract

In this joint work with X. Zhou, we prove that in the three dimensional sphere with a bumpy metric or a metric with positive Ricci curvature, there exist at least four distinct embedded minimal two-spheres. This confirms a conjecture of S. T. Yau in 1982 for bumpy metrics and metrics with positive Ricci curvature. The proof relies on a multiplicity one theorem for the Simon-Smith min-max theory.

Date: October 13, 2023 (Friday)
Time: 11:00am-noon (Hong Kong time)
ZOOM link: https://cuhk.zoom.us/j/91805734715

All are Welcome