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Joint Geometric Analysis Seminar

(Part of MIST program)

Intrinsic flat stability of the positive mass theorem for graphical manifolds

Prof. Raquel Perales
National Autonomous University of Mexico

Abstract

The rigidity of the Riemannian positive mass theorem for asymptotically flat manifolds states that the total mass of such a manifold is zero if and only if the manifold is isometric to the Euclidean space. This leads us to ask whether a stability result holds. We will provide a positive answer for a class of asymptotically flat graphical manifolds described by Huang-Lee-Sormani and by using the intrinsic flat distance. In particular, we will discuss the work of Huang-Lee-Sormani, Allen-Perales, Huang-Lee-Perales and Del Nin-Perales.

Date: ~~March 31, 2023~~ April 21, 2023 (Friday)
Time: 11:00am-noon (Hong Kong time)
ZOOM link: https://cuhk.zoom.us/j/91805734715

All are Welcome