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Joint Geometric Analysis Seminar

(Part of MIST program)

Rigidity of Riemannian Penrose inequality with corners and its implications

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Abstract

Motivated by the rigidity case in the localized Riemannian Penrose inequality, we show that suitable singular metrics attaining the optimal value in the Riemannian Penrose inequality is necessarily smooth in properly specified coordinates. If applied to hypersurfaces enclosing the horizon in a spatial Schwarzschild manifold, the result gives the rigidity of isometric hypersurfaces with the same mean curvature. This is a joint work with Pengzi Miao.

Date: 26 January 2022 (Wednesday)
Time: 10:00am – 11:00am (Hong Kong time)
ZOOM link: <https://cuhk.zoom.us/j/91805734715>

All are Welcome