RAQUEL PERALES, Centro de Investigacion en Matematicas
Intrinsic flat stability of the positive mass theorem for graphical manifolds

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 us whether a stability result holds. We will provide a positive answer for a class of asymptotically flat graphical manifolds described by Huang-Lee-Sormani by using the intrinsic flat distance.