

WORKSHOP ON SUBMANIFOLD THEORY AND GEOMETRIC ANALYSIS

UFSCAR, SÃO CARLOS, BRAZIL, AUGUST 05 – 09, 2019

WEDNESDAY- 11:30h - 12h -AUDITÓRIO DO DM

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Rigidity of Submanifolds in a Constant Curvature Space

ABSTRACT. Let M be a complete submanifold with constant mean curvature immersed in a given space of constant curvature. Our objective is to present some condition on first eigenvalue of Laplacian or stability condition to obtain rigidity results on immersion. We will show when an immersion is totally geodesic in a hyperbolic space, or when it's isometric to some space form in a Lorentz space. We will also obtain some estimates for the first eigenvalue of the super stability operator for a surface minimally immersed in the hyperbolic space.

Support:



Organizers:

