On Quasi-Minimal Isometric Immersions into Semi Riemannian Space Forms of Index 2

Nurettin Cenk Turgay

Department of Mathematics, Istanbul Technical University, Turkey
E-mail: turgayn@itu.edu.tr

ABSTRACT

An isometric immersion f from a Lorentzian surface into a semi Riemannian manifold of index 2 is called quasi minimal if its mean curvature vector field is light like at every point. In this talk we would like to discuss quasi minimal immersions in terms of being critical point of bienergy functional. In particular, we will present a rigidity result on Lorentzian surfaces which admit such isometric immersions. We will also show some explicit examples.