

MAXIMAL SURFACES IN CERTAIN LORENTZIAN PRODUCTS

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Resumo/Abstract:

We dealt with maximal surfaces in a Lorentzian manifold given by the warped product of the negative definite real line and a 2-dimensional Riemannian manifold, when the Gauss curvature of the Riemannian manifold is bounded from below, and the warping function is real-positive. The main purpose is to characterize such surfaces satisfying a comparison involving the height function and the shape operator as slices. The estimates in our results are observed to be optimal as we show in examples. The results are in preprint with Alfonso Romero and Adriano Medeiros see [12].

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