

Uniqueness results for constant mean curvature spacelike surfaces in Lorentzian spaces

ALMA L. ALBUJER, LUIS J. ALÍAS¹

Universidad de Murcia (Spain)

albujer@um.es

Abstract

We will introduce some uniqueness results for complete spacelike surfaces with constant mean curvature immersed into a certain family of generalized Robertson-Walker spacetimes. In particular, our study includes that of maximal surfaces in product Lorentzian spaces, as well as constant mean curvature surfaces in the so called *steady state universe*. These results are part of our joint work with Luis J. Alías and are contained in the two following references:

- [1] A.L. Albuje and L.J. Alías, Calabi-Bernstein results for maximal surfaces in Lorentzian product spaces, preprint 2006.
- [2] A.L. Albuje and L.J. Alías, Some uniqueness results for constant mean curvature spacelike surfaces, work in progress.

¹The talk will be presented by the first author (Alma L. Albuje)