Geometry Seminar

The Dirichlet problem for the CMC equation with infinite boundary data in Sol$_3$

Patrícia Klaser

Universidade Federal de Santa Maria

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Acesso à sala virtual:

Abstract. In 1972 Spruck studied this problem in the Euclidean space and exhibited conditions on a domain $\Omega \subset \mathbb{R}^2$ in order that it admits a solution. Besides he proved the existence of curvilinear quadrilaterals on which there is a Scherk type CMC surface, that is, it is the graph of a solution to the CMC equation taking values plus and minus infinity on alternate sides.

In this talk an analogous result in the ambient space Sol$_3$ will be presented. This is a joint work with Ana Menezes, from Princeton University.