

Theodora Bourni

Title: A criterion on embeddedness of surfaces with 'small' mean curvature

Abstract:

In a paper of '02, Ekholm, White and Wienholtz showed that a minimal surface bounded by a simple closed curve of total curvature at most  $4\pi$  is embedded. In this talk I will describe some results that extend this theorem to surfaces whose mean curvature has small  $L^p$  norm ( $p > 2$ ). As an application, for surfaces in  $\mathbb{R}^3$ , I will derive curvature estimates and a bound on the genus of such surfaces. This is a joint work with G. Tinaglia.