

A dichotomy theorem for minimal surfaces

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Resumo/Abstract:

I will describe a natural family of curves, each of which bounds a very large number of embedded minimal disks. I will also discuss a surprising dichotomy: for those curves, each such disk is either very close to helicoidal, or very far from helicoidal. I will use the dichotomy theorem to prove existence of warped helicoids, and I will discuss the relevance of such warped helicoids to the Colding-Minicozzi Theory.