

Systoles, diastoles and minimal surfaces

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Abstract

We will discuss projective planes embedded in a Riemannian projective space of dimension three, and minimal two-dimensional spheres embedded in a Riemannian sphere of dimension three. In particular, we will discuss how big the infimum of the area of these surfaces can be when compared to the ambient volume, and what happens when the Riemannian metric varies. This is part of a joint project with R. Montezuma (UFC).

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