

# Abundance of minimal hypersurfaces in closed manifolds

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Minimal surfaces, which are critical points of the area functional, are in general hard to construct. Recently, questions about their existence in closed Riemannian manifolds enjoyed important developments thanks to the work of F. C. Marques and A. Neves, and others. I will introduce some ideas behind the variational theory for minimal surfaces, and survey results revolving around a conjecture of S.-T. Yau which predicted the existence of infinitely many minimal surfaces in any closed 3-manifold.