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Antoine Y Song* (aysong@math.princeton.edu). *Existence of infinitely many minimal hypersurfaces in closed manifolds.*

In the early 80's, Yau conjectured that in any closed 3-manifold there should be infinitely many minimal surfaces. After reviewing previous contributions on the question, I will present a solution of the conjecture, which builds on min-max methods developed by F. C. Marques and A. Neves. A key step is to localize min-max constructions to compact manifolds with non-empty stable boundary, and I will explain how to achieve this via the construction of a non-compact manifold with cylindrical ends. (Received January 25, 2019)