Tian, Gang; Zhang, Qi S.
Isoperimetric inequality under Kähler Ricci flow. (English) Zbl 1317.53091

Authors’ abstract: Let $(M, g(t))$ be a Kähler Ricci flow with positive first Chern class. First, we prove a uniform isoperimetric inequality for all time. In the process, we also prove a Cheng-Yau type log gradient bound for positive harmonic functions on $(M, g(t))$ without assuming the Ricci curvature is bounded from below.

Reviewer: Antonio Masiello (Bari)

MSC:
53C44 Geometric evolution equations (mean curvature flow, Ricci flow, etc.) (MSC2010)
53C55 Global differential geometry of Hermitian and Kählerian manifolds
49Q10 Optimization of shapes other than minimal surfaces

Keywords:
Kähler metrics; Ricci flow; isoperimetric inequality; harmonic functions

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