

# Mean curvature flow of higher codimension in Riemannian manifolds

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(Submitted on 31 Mar 2012)

We investigate the convergence of the mean curvature flow of arbitrary codimension in Riemannian manifolds with bounded geometry. We prove that if the initial submanifold satisfies a pinching condition, then along the mean curvature flow the submanifold contracts smoothly to a round point in finite time. As a consequence we obtain a differentiable sphere theorem for submanifolds in a Riemannian manifold.

Comments: 28 pages

Subjects: **Differential Geometry (math.DG)**

Cite as: [arXiv:1204.0107](https://arxiv.org/abs/1204.0107) [math.DG]

(or [arXiv:1204.0107v1](https://arxiv.org/abs/1204.0107v1) [math.DG] for this version)

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