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**Initial stability estimates for Ricci flow and three dimensional Ricci-pinched manifolds**

Abstract: We investigate the question of stability for a class of Ricci flows which start at possibly non-smooth metric spaces. We show that if the initial metric space is Reifenberg and locally bi-Lipschitz to Euclidean space, then two solutions to the Ricci flow whose Ricci curvature is uniformly bounded from below and whose curvature is bounded by  $ct^{-1}$  converge to one another at an exponential rate once they have been appropriately gauged. As an application, we show that smooth three dimensional, complete, uniformly Ricci-pinched Riemannian manifolds with bounded curvature are either compact or flat, thus confirming a conjecture of Hamilton and Lott. This is joint work with A. Deruelle and M. Simon.