

# Sequence of Riemannian metrics with locally controlled curvature on a closed aspherical 3-manifold

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**Abstract.** We consider sequences of Riemannian metrics on a closed aspherical 3-manifold such that the sectional curvature is locally controlled and the thick part asymptotically converges to a hyperbolic 3-manifold. Under some hypothesis the existence of such a sequence implies that the manifold either contains an incompressible torus or is Seifert fibered. Perelman's long term Ricci flow with surgeries allow to apply this result to geometrize aspherical 3-manifolds.