

1131-53-25

James Isenberg, Dan Knopf* (danknopf@math.utexas.edu) and **Natasa Sesum**. *Non-Kähler Ricci flow singularities that converge to Kähler-Ricci solitons.*

We investigate Riemannian (non-Kähler) Ricci flow solutions that develop finite-time Type-I singularities with the property that parabolic rescalings at the singularities converge to singularity models that are shrinking Kähler–Ricci solitons. More specifically, the singularity model for these solutions is the “blowdown soliton” discovered in [FIK03]. Our results support the conjecture that the blowdown soliton is stable under Ricci flow. This work also provides the first set of rigorous examples of non-Kähler solutions of Ricci flow that become asymptotically Kähler, in suitable space-time neighborhoods of developing singularities, at rates that break scaling invariance. These results support the conjectured stability of the subspace of Kähler metrics under Ricci flow. (Received May 23, 2017)