1063-53-68 **Dan Knopf*** (`danknopf@math.utexas.edu`). *Formal matched asymptotics for degenerate Ricci flow neckpinches.* Preliminary report.

Gu and Zhu have shown that Type-II Ricci flow singularities develop from non-generic rotationally symmetric Riemannian metrics on spheres. We derive and provide arguments for detailed asymptotic profiles and curvature blow-up rates of such solutions. In forthcoming work, we will provide rigorous proof that there exist solutions exhibiting the asymptotic behavior formally described here. This is joint work with Sigurd Angenent and James Isenberg. (Received August 03, 2010)