1104-58-29   **John Lott*** (`lott@berkeley.edu`) and **Bruce Kleiner**. *Ricci flow through singularities.*

Perelman's Ricci flow-with-surgery involves a surgery parameter δ, which describes the scale at which surgery is performed. We show that there is a subsequential limit as δ goes to zero, thereby partially answering a question of Perelman. The limiting object is called a singular Ricci flow. Such objects can considered to be flows through singularities, and studied in their own right. We prove some geometric and analytical properties of such singular Ricci flows. (Received July 04, 2014)