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Paula Burkhardt-Guim*, paulab@math.berkeley.edu. *Pointwise lower scalar curvature bounds for C^0 metrics via regularizing Ricci flow.*

We propose a class of local definitions of weak lower scalar curvature bounds that is well defined for C^0 metrics. We show the following: that our definitions are stable under greater-than-second-order perturbation of the metric, that there exists a reasonable notion of a Ricci flow starting from C^0 initial data which is smooth for positive times, and that the weak lower scalar curvature bounds are preserved under evolution by the Ricci flow from C^0 initial data. (Received March 04, 2021)