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*ADM mass for  $C^0$  metrics and distortion under Ricci-DeTurck flow*

We show that there exists a quantity, depending only on  $C^0$  data of a Riemannian metric, that agrees with the usual ADM mass at infinity whenever the ADM mass exists, but has a well-defined limit at infinity for any continuous Riemannian metric that is asymptotically flat in the  $C^0$  sense and has nonnegative scalar curvature in the sense of Ricci flow. Moreover, the  $C^0$  mass at infinity is independent of choice of  $C^0$ -asymptotically flat coordinate chart, and the  $C^0$  local mass has controlled distortion under Ricci-DeTurck flow when coupled with a suitably evolving test function.