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Kevin Sonnanburg* (ksonnanb@vols.utk.edu). *Blow-up Continuity for Mean-Convex, Type-I Mean Curvature Flow.*

Under mean curvature flow, each point of a hypersurface moves with velocity equal to its mean curvature. A closed, embedded hypersurface $M(t)$ becomes singular in finite time. One of the most basic questions about a PDE that develops singularities is the relationship between the occurrence of its singularities and its initial data. For certain classes of mean-convex mean curvature flows, we show the first singular time T and the limit set “ $M(T)$ ” is continuous with respect to the initial hypersurface.

We employ an Angenent-like neckpinching argument to force singularities in nearby flows. However, since we cannot prescribe initial data, we combine Andrews’ α -non-collapsed condition and Colding and Minicozzi’s uniqueness of tangent flows to ensure the development of a neck-like structure and place appropriately sized spheres in the two regions outside the neck. (Received September 25, 2017)