MERAJ HOSSEINI, Concordia University

Contraction of Convex Hypersurfaces in $\mathbb{R}^3$ by Powers of Principal Curvatures

We study the contraction of strictly convex, axially symmetric hypersurfaces by a non-symmetric, non-homogeneous, fully nonlinear function of curvature. Starting from axially symmetric hypersurfaces with even profile curves, we show evolving hypersurfaces converge to a single point in a finite time, and under proper rescaling, solutions will converge to a convex hypersurface.