

Mean curvature flow

Tobias Holck Colding
MIT School of Science, U.S.A.

Mean curvature flow is the negative gradient flow of volume, so any hypersurface flows through hypersurfaces in the direction of steepest descent for volume and eventually becomes extinct in finite time. Before it becomes extinct, changes can occur as it goes through singularities. We will survey recent results about what singularities can occur and what is known about the space-time set where the flow is singular.