

Amos Koeller Regularity Theory for mean curvature flows with Neumann free boundary conditions.

TIME:

17 Apr 2007, 17:00

LOCATION:

Arnimallee 6, 14195 Berlin-Dahlem (Raum 031)

We consider mean curvature flow with Neumann free boundary conditions. That is, mean curvature flow with a boundary that is allowed to move freely along a fixed support surface provided that the flowing and support surfaces meet perpendicularly for as long as the flow is defined. We show parallels between the theory for mean curvature flow with Neumann free boundary conditions and the boundaryless mean curvature flow. We observe, in particular the first singular time of the flow and show that the Hausdorff n measure (where n is the dimension of the flowing surface) of the singularity set at the first singular time is zero.