

**Felix Schulze**

## **No mass drop for mean curvature flow of mean convex hypersurfaces**

**TIME:**

31 Oct 2006, 17:00 - 19:00

**LOCATION:**

Freie Universität Berlin - Fachbereich Mathematik und Informatik  
Arnimallee 2-6, 14195 Berlin-Dahlem (Raum 031)

A possible evolution of a compact hypersurface in  $\mathbb{R}^{n+1}$  by mean curvature past singularities is defined via the level set flow. In the case that the initial hypersurface has positive mean curvature, we show that the Brakke flow associated to the level set flow is actually a Brakke flow with equality. We obtain as a consequence that no mass drop can occur along such a flow. As a further application of the techniques used above we give a new variational formulation for mean curvature flow of mean convex hypersurfaces.

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