



Universität Konstanz

**Fachbereich
Mathematik und Statistik**

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Datum: 26. April 2010

Im
Oberseminar Partielle Differentialgleichungen
wird am
Donnerstag, dem 29. April 2010,
folgender Vortrag gehalten:

Dr. Thomas Marquardt (MPI für Gravitationsphysik, Potsdam):
„Expansion of Hypersurfaces with Boundary in a Cone“

Zeit: 14:15 Uhr

Raum: F 427

Interessenten sind herzlich willkommen!

R. Denk, H. Freistühler, O. Schnürer

Abstract: In this talk we consider hypersurfaces with boundary in Euclidean space which evolve in the direction of the unit normal with speed equal to the reciprocal of the mean curvature. As a motivation we start with an introduction about the basic properties of this geometric flow for closed hypersurfaces. Then we will discuss this flow in the case where the hypersurfaces possess a boundary and move along but stay perpendicular to a fixed supporting hypersurface. After short time existence for that problem is established we will concentrate on the case where the supporting hypersurface is a convex cone.