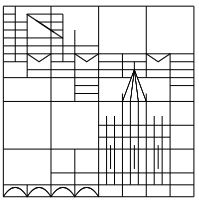
Universität Konstanz

Fachbereich
Mathematik und Statistik



Prof. Dr. Robert Denk
Prof. Dr. Heinrich Freistühler
Prof. Dr. Reinhard Racke
Prof. Dr. Oliver Schnürer

Im

Oberseminar Partielle Differentialgleichungen

gibt es am

Donnerstag, dem 12. Dezember 2013,

einen Vortrag von

Dr. Matthias Makowski

(Universität Konstanz)

"Rigidity results, inverse curvature flows and Alexandrov-Fenchel type inequalities in the sphere"

Beginn: **15:15 Uhr**

Raum: **F 426**

Interessenten sind herzlich willkommen!

R. Denk, H. Freistühler, R. Racke, O. Schnürer

Abstract: We prove a rigidity result in the sphere which allows us to generalize a result about smooth convex hypersurfaces in the sphere by Do Carmo-Warner to convex C^2-hypersurfaces. We apply these results to prove $C^{1,\beta}$-convergence of inverse F-curvature flows in the sphere to an equator in $\mathbb{S}^{n+1}$ for embedded, closed, orientable, strictly convex initial hypersurfaces. The result holds for large classes of curvature functions including the mean curvature and arbitrary powers of the Gauss curvature. We use this result to prove Alexandrov-Fenchel type inequalities in the sphere. *(This is joint work with Dr. Julian Scheuer.)*

(invited by Oliver Schnürer)