Universität Konstanz

Fachbereich Mathematik und Statistik

Prof. Dr. R. Denk, Prof. Dr. R. Racke, Prof. Dr. O. Schnürer

Im

Oberseminar Partielle Differentialgleichungen

gibt es am

Donnerstag, dem 01. Februar 2018,

einen Vortrag von Herrrn

Dr. Heiko Kröner

(Universität Freiburg)

"Inverse curvature flows in asymptotically Robertson Walker spaces"

Beginn: **15.15 Uhr**
Raum: **F426**
Interessenten sind herzlich willkommen!

R. Denk, R. Racke, O. Schnürer

Abstract: In this paper we consider inverse curvature flows in a Lorentzian manifold N which is the topological product of the real numbers with a closed Riemannian manifold and equipped with a Lorentzian metric having a future singularity so that N is asymptotically Robertson Walker. The flow speeds are future directed and given by 1/F where F is a homogeneous degree one curvature function of class (K^*) of the principal curvatures, e.g. the n-th root of the Gauss curvature. We prove longtime existence of these flows and that the flow hypersurfaces converge to smooth functions when they are rescaled with a proper factor which results from the asymptotics of the metric.

(invited by Prof. Dr. Oliver Schnürer)