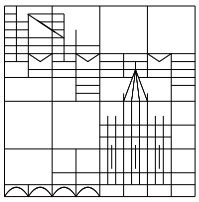
Universität Konstanz

Fachbereich
Mathematik und Statistik



Prof. Dr. Robert Denk

Prof. Dr. Michael Dreher

Prof. Dr. Reinhard Racke

Prof. Dr. Oliver Schnürer

Im

Oberseminar Partielle Differentialgleichungen

gibt es am

Donnerstag, dem 14. Februar 2013,

einen Vortrag von

Prof. Dr. Norbert Hungerbühler *(ETH Zürich)*:

"Heat flow problems and Young measures".

Beginn: **15:15 Uhr**

Raum: **F 426**

Interessenten sind herzlich willkommen!

R. Denk, M. Dreher, R. Racke, O. Schnürer

Abstract: Let M and N be compact smooth Riemannian manifolds without boundaries. Then, for a map $u : M \to N$ we consider a class of energies which includes the the popular Dirichlet energy and the more general p-energy. Geometric or physical questions motivate to investigate the critical points of such an energy or the corresponding heat flow problem. In the case of the Dirichlet energy, the heat flow problem has been intensively studied and is well understood by now. However, it has turned out that the case of the p-energy ($p \neq 2$) is much more difficult in many respects. We give a survey of the known results for the p-harmonic flow and indicate how these results can be extended to a larger class of energy types by using Young measure techniques which have been developed for stationary problems in recent years.

(invited by Prof. Dr. Oliver Schnürer)