Universität Konstanz

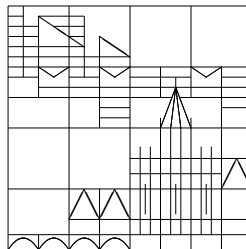**Fachbereich Mathematik und Statistik**

Prof. Dr. Robert Denk

Prof. Dr. Reinhard Racke

Prof. Dr. Oliver Schnürer
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Konstanz, den 28. April 2011

Im

Oberseminar Partielle Differentialgleichungen

wird am

Donnerstag, dem 03. Februar 2011,

folgender Vortrag gehalten:

Patrick Kurth (Universität Konstanz):
"Well-posedness and asymptotic behaviour of ordinary integro-differential equations in glass rheology "

Zeit: 14:15 Uhr

Raum: F 426

Interessenten sind herzlich willkommen!

R. Denk, R. Racke, O. Schnürer

Abstract: We consider equations of the so-called mode coupling theory of glass transition (MCT). These are ordinary integro-differential equations that are characterized by non-linear memory-convolution-terms whose kernels depend on the solutions of the equations. We will proof existence and uniqueness of solutions for a new class of kernels. After that we will discuss asymptotic behaviour of solutions, i.e. polynomial konvergence under certain restrictions. Finally we will transfer these results into problems with additional time-dependent kernels.