Universität Konstanz

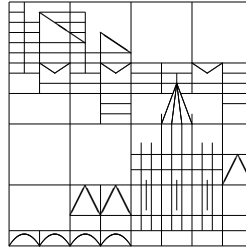**Fachbereich
Mathematik und Statistik**

Prof. Dr. Robert Denk

Prof. Dr. Reinhard Racke

Prof. Dr. Oliver Schnürer
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Konstanz, den 11. November 2010

Im

Oberseminar Partielle Differentialgleichungen

wird am

Donnerstag, dem 18. November 2010,

folgender Vortrag gehalten:

Prof. Dr. Hugo d. Fernández Sare (Federal University of Rio de Janeiro): "On the Rate of Decay in Interacting Continua with Memory"

Zeit: 14:15 Uhr

Raum: F 426

Interessenten sind herzlich willkommen!

R. Denk, R. Racke, O. Schnürer

Abstract: We are interested in the study of a model in linear theory of isothermal interacting continua with memory. We consider anti-plane shear deformations in a mixture of two elastic solids where the dissipation mechanisms can be the viscosity in one of the components and the viscosity with respect the relative displacement. We have seen that when the only dissipation mechanism applies on the relative displacement we can not expect the exponential decay for the solutions. We have also analyzed the case when the viscosity mechanism applies on a constituent. We have seen that generically the decay is of exponential type. However if the coupling constitutive parameter vanishes the decay is slow.

(invited by Prof. Dr. Racke)