



Im

Oberseminar Partielle Differentialgleichungen

gibt es am

Donnerstag, dem 16. Februar 2017,

einen Vortrag von Frau

Dr. Le Nguyen Kim Hang

(Universität Ulm)

“Local solution to a nonlinear problem arising in meteorology”

Beginn: **15.15 Uhr**

Raum: **F426**

Interessenten sind herzlich willkommen!

R. Denk, R. Racke, O. Schnürer

Abstract: In this work, we study the local solution to a nonlinear equation arising in meteorology, whose linearized operator is of mixed type. Precisely, it is elliptic on one side of a hypersurface and hyperbolic on its other side. The change of type makes the problem quite interesting. We first show the unique existence and a priori estimates for the solution to the equation associated with linearized operator. Then, we use Nash-Moser iterations twice to solve the nonlinear equation in elliptic and hyperbolic regions separately and then extend the solution across the hypersurface.

(invited by Prof. Dr. Reinhard Racke)