## Einladung

Am Montag, den 21.06.10 hält im Rahmen des Institutskolloquiums und des Seminars "Partielle Differentialgleichungen"

## Herr Prof. F. Hirosawa (Yamaguchi University)

einen Vortrag zu dem Thema

## On the energy estimates of second order hyperbolic equations with time dependent coefficients

Vortragszusammen fassung:

We consider the energy estimates for second order homogeneous hyperbolic equations with time dependent coefficients. If the coefficients are constants, then the energy conservation is valid; but it is not true for variable coefficients case. If only one of the coefficients is variable, then we have studied that the sufficient conditions for the generalized energy conservation (=GEC), which is an energy conservation in a general meaning, are given by the oscillation and the smoothness properties of the coefficient. However, if more than two of the coefficients are variable, then the same conditions to the coefficients as the single variable coefficient case cannot conclude GEC, because some resonance phenomenon of these coefficients are possible to make the energy unstable. In my talk we introduce some examples of the coefficients, which conclude GEC and non-GEC.

This research is joint work with Bui Tang Bao Ngoc from Hanoi University of Technology, Vietnam.

Beginn: 16.00 Uhr, Ort: Raum 1103, Prüferstr.1.

Interessenten sind herzlich eingeladen.

Prof. Dr. M. Reissig