



Im  
Oberseminar Partielle Differentialgleichungen  
wird am  
Donnerstag, dem 1. Juli 2010,  
folgender Vortrag gehalten:

Dr. Belkacem Said-Houari (Konstanz):  
*„Global nonexistence results for a class of hyperbolic systems“*

**Zeit:** 15:30 Uhr (!)

**Raum:** R 512 (!)

Interessenten sind herzlich willkommen!

R. Denk, H. Freistühler, O. Schnürer

**Abstract:** Our concern in this talk is to prove blow-up results to the non-autonomous nonlinear system of wave equations

$$u_{tt} - \Delta u = a(t, x)|v|^p, \quad v_{tt} - \Delta v = b(t, x)|u|^q$$

in any space dimension. We show that a curve  $\tilde{F}(p, q) = 0$  depending on the space dimension, on the exponents  $p, q$  and on the behavior of the functions  $a(t, x)$  and  $b(t, x)$  exists, such that all nontrivial solutions to the above system blow up in a finite time whenever  $\tilde{F}(p, q) > 0$ .

Our result generalizes some other results and applies to a wide variety of problems.