

# MATHEMATIKKOLLOQUIUM

Das Institut für Mathematik lädt zu folgendem Vortrag ein:

**Etienne Emmrich**

Institut für Mathematik, TU Berlin

## **Nonlinear evolution equations of second order with damping: existence and discretisation**

We study different classes of nonlinear evolution equations of second order in time that also include first order terms. Our focus is on the convergence of simple semi- or full discretisations, which also proves existence of generalised solutions. Depending on the structural properties of the underlying differential operators, techniques from the theory of monotone operators and compactness arguments, based on suitable a priori estimates, are the basic ingredients. Examples arise, in particular, in solid mechanics.

**Zeit: Donnerstag, den 6. Dezember 2012 um 17:15 Uhr**

**Ort: Bauing.-Gebäude, Technikerstraße 13, HSB 7**

**Gäste sind herzlich willkommen!**

*Mechthild Thalhammer*