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OBERSEMINAR IM INSTITUT FÜR ANGEWANDTE ANALYSIS Sommersemester 2025

Im Rahmen des Oberseminars spricht am Montag, den **28. April 2025**:

SEBASTIAN THROM
Umeå Universitet

Self-similarity for the inelastic Boltzmann equation with moderately hard potentials

Inelastic interaction in granular media is a frequent phenomenon in many applications which, on the microscopic level, is characterised by dissipation of kinetic energy. A common model to describe such systems is given by the inelastic Boltzmann equation.

In this talk, we will consider a one dimensional version of this model and the occurrence of self-similarity in the long-time limit. More precisely, we study the uniqueness of corresponding self-similar profiles in the regime of moderately hard potentials. The proof relies on a perturbation argument from the Maxwell model together with corresponding regularity estimates and a detailed analysis of the linearised equation.

Der Vortrag findet in **Raum E.60, Helmholtzstr. 18** statt.
Beginn: 16 Uhr (c.t.). Alle Interessierten sind herzlich eingeladen.

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