



**Leopold-Franzens-Universität Innsbruck**

Institut für Informatik

ICT-Gebäude

Technikerstr. 21a

A-6020 Innsbruck

Univ.-Prof. Dr. Otmar Scherzer

# MATHEMATIKKOLLOQUIUM

Das Institut für Informatik lädt zu folgendem Vortrag ein:

**Dr. Andreas Putz**

**University of British Columbia, Vancouver**

## **Sedimentation Problems in Viscoplastic Fluids: An Experimental Study**

We have studied the flow around a sedimenting spherical particle in a Carbopol solution, a fluid which displays viscoplastic behaviour. Laser illumination techniques and Particle Image Velocimetry are used to obtain the velocity fields of a two dimensional cross section of the flow. We will discuss the topological properties of these flow fields and attempt to classify their properties with respect to the relevant rheological quantities.

We will also discuss the differences between the experimentally obtained flow field and numerical calculations based on Bingham or Herschley-Bulkley models. This seminar should be of interest to mathematicians, engineers and physicists, with an interest in the fluid mechanics of complex fluids.

**Zeit: Donnerstag, den 8. Februar 2007 um 17:15 Uhr**

**Ort: Viktor-Franz-Hess-Haus, Technikerstraße 25, HS D**

*Otmar Scherzer*

**Gäste sind herzlich willkommen!**