



Im Rahmen des Kolloquiums des  
**Graduiertenkollegs Algorithmic Optimization**  
findet am

**Montag, dem 23. Oktober 2017**

**16:00 Uhr c.t.**

**Hörsaal 9**

folgender Vortrag statt:

## **Optimal Control, Stabilization and Parameter Identification for evolution models**

Prof. Mapundi K. Banda  
University of Pretoria, South Africa

Evolution models governed by the time-dependent partial differential equations will be considered. In this talk, we will present some ideas on optimal control, boundary stabilization and parameter identification for a selection of such models. For instance, boundary information will be used to stabilize or to identify parameters of the models. The first part of the presentation will discuss numerical optimal control and stabilization of hyperbolic conservation laws. The second part will discuss how boundary measurements can be used to simultaneously identify a coefficient and an initial condition of a parabolic partial differential equation using an identification algorithm. Numerical algorithms will be discussed and the effectiveness of the proposed algorithms will also be demonstrated.

### **Gastgeber:**

Prof. Dr. Volker Schulz

Kolloquiums Kaffee ab 15:45 Uhr im Raum E 10