

## EINLADUNG

- Zeit: Mittwoch, 16.04.2008, 15.00 Uhr
- Ort: Ahornstr. 55, Altbau, 3. OG, Raum 2323  
(Seminarraum Informatik 11)
- Referent: Frau Dr. Erika Ábrahám,  
FZ Jülich
- Titel: Bounded Model Checking for Hybrid Systems

### Abstract:

Bounded model checking (BMC) is an automatic verification method that is based on finitely unfolding the system's transition relation. BMC has been successfully applied, in particular, for discovering bugs in digital system design. Its success is based on the effectiveness of satisfiability solvers that are used to check for a finite unfolding whether a violating state is reachable.

The topic of the talk is the extension of BMC to hybrid systems. Besides the basic algorithm, optimizations in problem formalization, memory-efficient representation, and parallelization for linear hybrid systems are introduced. Also extensions to non-linear systems are discussed.