

## **Fachbereich Computerwissenschaften**

## **EINLADUNG**

zum Gastvortrag am

Mittwoch 3. Juni 2009, 15.15 HS T05

Institutsgebäude Jakob-Haringer-Str. 2, Itzling

von

## Prof. P. Puschner

professor in computer science at Vienna University of Technology

### zum Thema:

# Towards Predictable and Composable Timing in Real-Time Software

#### Abstract:

As real-time software is increasing in size and complexity, the need for advanced modeling and analysis capabilities early in the software development process is getting more and more urgent.

One particular concern is the lack of sufficient methods and tools to effectively reason about the timing of software in such a way that software systems can be constructed hierarchically from components while still guaranteeing the timing properties.

In this talk, we will discuss deficiencies in current real-time embedded hardware and software structures with respect to achieving our goal of composable and predictable timing behavior. To address these deficiencies, we will then discuss programming methods, code generation techniques, and ideas about hardware and software architectures that should help us in achieving a truly timing-composable and compositional engineering process for real-time software systems.