



19. September 2007

Vortragsankündigung

Am **Dienstag, dem 18. Dezember 2007**, 14⁰⁰ Uhr, findet im **M-Lab** (Raum 406, 4. Stock, Gebäude A1 Nord), folgender Vortrag statt.

Testbeds and Prototyping in Wireless System Design

Univ. Prof. Dr.–Ing. Markus Rupp

**Institut für Nachrichtentechnik und Hochfrequenztechnik
Technische Universität Wien**

http://www.nt.tuwien.ac.at/rapid_prototyping

Abstract:

Wireless transceivers become more and more complex. Due to tight time to market constraints, industry abandons time consuming and costly prototyping and relies their designs entirely on simulation results. However, such a development strategy is very risky. Prototyping on the other hand offers de-risking when communication systems based on new technology are to be developed. In order to be accepted in industrial design flows prototyping must become rapid.

This talk presents numerous examples for wireless designs. We hereby distinguish between a wireless testbed that allows for a quick performance of real-time experiments, utilizing the wireless channel while a postprocessing is required in offline mode. Examples include Space-Time-Code design, adaptive equalizers, MIMO HSDPA, as well as MIMO antenna designs. On the other hand prototyping allows for fixed-point solutions and design space exploration, comparing various hardware architectures. A special design flow offers rapid prototyping of heterogeneous DSP and FPGA structures allowing for few people to convert algorithmic design ideas into real-time experiments. Presented examples include MIMO WLAN systems, channel emulators and adaptive predistortion techniques for power amplifiers

Die Dauer des Vortrags beträgt ca. 60 Minuten, bei reger Diskussion etwas länger. Der Vortrag ist öffentlich und alle Interessenten sind dazu herzlich eingeladen. Die Vortragssprache ist Deutsch.

Fachhochschule Wiesbaden, Am Brückweg 26, D-65428 Rüsselsheim

URL: <http://www.ite.fh-wiesbaden.de>

Beschreibung der Anfahrt siehe: <http://www.ite.fh-wiesbaden.de/anfahrt/index.html>