

Westfälische Wilhelms-Universität Münster FACHBEREICH 10 MATHEMATIK UND INFORMATIK Prof. Dr. Martin Stein Dekan

11.04.2013

## Einladung

Am Dienstag, 16.04.2013, 10:30 Uhr, Hörsaal M3

spricht

## Dr. Jan Haase

über

## "Power Consumption Simulation for Wireless Sensor Networks"

Sensor Networks (wired and wireless) are becoming more and more common. Typical application areas are building automation, automotive and aviation environments, intelligent traffic management systems, container tracking, and even wearable computing or body-implanted sensor chips. As many of these devices are battery-powered, their energy consumption has to be minimized to prolong the life of the battery and thereby the sensor's usefulness. One part can be achieved by power management at run time, but the (embedded) system itself should already be optimized at design time. This is done mainly by simulation.

In this talk I will show an approach of power estimation for a whole network of sensors which by simulation of hardware, software, and network communication gives indication not only of hot spots on chips or in networks, but also costly transmissions and e.g. the effect of different communication protocols, topologies, and possible resends.

## Auf diesen Vortrag wird besonders hingewiesen

Martin Stein, Dekan