

## **EMBEDDED TUTORIAL – Software for Wireless Networked Embedded Systems**

- Organisers: J Beutel, ETH Zurich, Switzerland  
M Beigl, TU Braunschweig, Germany
- Moderator: M Beigl, TU Braunschweig, Germany
- Presenters: A Dunkels, Swedish Institute of Computer Science, Kista, Sweden  
K Langendoen, TU Delft, The Netherlands  
J Beutel, ETH Zurich, Switzerland

Embedded systems driven by future applications will be tightly coupled with the increasing complexity of the real world. Consisting of myriads of wireless networked devices, of heterogeneous architectures, distributed and interacting in a number of ways and serving a multitude of purposes systems have to adapt and take advantage of conditions unpredictable at design time.

In their realisation software both on a system and on an application level is playing an increasingly important role that cannot be designed independently. Dominant design factors are the severe resource constraints, the unreliability of the wireless medium and the dynamics of both the applications and the environment. Selected challenges in the area of wireless sensor networks are addressed by the speakers in this special session highlighting the current gap between theory and practice in an emerging field.