

# Summer School on Wireless Sensor Networks and Smart Objects



Holger  
Karl



Marc  
Langheinrich



Jan  
Beutel



Albrecht  
Schmidt



Joe  
Polastre



[www.vs.inf.ethz.ch/events/dag2005](http://www.vs.inf.ethz.ch/events/dag2005)



Koen  
Langendoen



Friedemann  
Mattern



Pedro  
Marron



Kay  
Römer



Rob  
Szewczyk

Aug 29 – Sep 03, 2005,  
Schloss Dagstuhl

Summer School on Wireless Sensor Networks and Smart Objects  
August 29 - September 3, 2005, Schloss Dagstuhl, Germany

**ETH**  
Eidgenössische Technische Hochschule Zürich  
Swiss Federal Institute of Technology Zurich

## Welcome !

- Organizational issues
- Introduction
  - Topics
  - Lecturers
- Comments on the agenda



Friedemann  
Mattern

Kay  
Römer

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## The Summer School

- Wireless Sensor Networks and Smart Objects
- 10 lecturers, 60 participants
  - bios in the handouts
- Sponsored by ETH Zurich and Embedded WiSeNts 
  - "Cooperating Embedded Systems for Exploration and Control featuring Wireless Sensor Networks"
  - "Coordination Action" funded by the European Commission, 12 partners from 10 European countries

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## Schloss Dagstuhl

- Built in 1760
- 1989 transformed into an International Conference and Research Center for Computer Science 
- Per year: 40-45 "Dagstuhl Seminars"
  - One week
  - Two or three scientists are responsible
  - Specific topic
  - Participants: scientists from all over the world

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# Dagstuhl



- Computer science research library
  - Always open, journals & books
- Billiard, chess, music instruments
  - Old building, first floor
- Newspaper room: S111

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# Organization

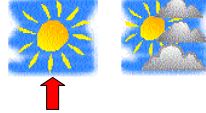
- Meals
  - Breakfast 7:30-8:45
  - Lunch at 12:15
  - Dinner at 18:00
  - Afternoon coffee 15:30
  - Wine cellar in the evening (wine, beer, ...)
- Lectures
  - Start at 9:00 (morning), 14:00 (afternoon)
  - But: we are flexible (e.g., move sessions to the evening to gain free time during the day)

**Please try to be on time  
for lunch and dinner**

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# Organization

- Weather forecast 
- Excursion
  - River cruise, hiking, wine, dinner (Thursday afternoon)
- Handouts
  - Participants' bios
  - Copies of slides

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# The Lecturers



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## Program

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- Lectures
- Participants' workshop
- TinyOS tutorial
- Application competition
- Excursion
- Leisure time

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## Lectures

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- Interactive, questions, discussions
- Specific topics
  - Motes and TinyOS
  - Medium access control
  - Dependable transport protocols
  - Deployment and experiences
  - Technologies for smart objects
  - Localization
  - Time synchronization
  - Middleware
  - From sensors to context
  - Privacy
  - Embedded interaction (+ videos and exercise)

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## Participant's Workshop

- 23 participants have been selected to give a short presentation of their work
- 4 sessions
  - Tuesday and Wednesday morning
  - Program in handout folder
- 10 min talk + 5 min discussion

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## TinyOS Tutorial

- Introductory lecture today
- TinyOS installation in the evening
- Hands-on Tuesday and Wednesday
  - 50 participants expressed interest
  - 25 each day
  - In parallel to workshop
- Put your name on the list!
  - Workshop presenters already listed
- Room: Kaiserslautern

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## Application Competition

- Announcement today
- Submission deadline Wednesday evening
- Results Saturday
  - Prices: iPods for the two best submissions

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## Excursion

- Thursday afternoon / evening
- Program
  - Bus to Mettlach (0.45)
  - River cruise on river Saar (1.30)
  - Bus to winery (1.15)
  - Light hiking (1.00)
  - Wine tasting and dinner (3.00)
  - Bus to Dagstuhl (1.00)

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## Leisure Time

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- Tuesday or/and Wednesday afternoon
- Various options
  - Walking tours in the environment of the center
  - Sports: bike, volleyball, boule, table-tennis, soccer playground
  - ...

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## Payment

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- Please note your private expenses (snacks, evening drinks, etc.) on the form you received at checkin
- Please pay the fee + private expenses at departure in the office

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## Embedded WiSeNts

- European Coordination Action (6th FP)
  - Strengthening European Position with respect to **Wireless Sensor/Actuator Networks and Smart Cooperating Objects**
- September 2004 - August 2006
- 12 European partners
- Industry Cooperation Board

[www.embedded-wisents.org](http://www.embedded-wisents.org)



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## Wisent - Goals I

1. Research Integration
  - Platforms and tools
  - Visitor program
  - Workshops (EWSN)
2. Roadmap preparation
  - Applications
  - Paradigms for algorithms and interactions
  - Vertical system functions
  - System architecture and programming models

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## Wisent - Goals II

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### 3. Education and Training

- Summer school
- Teachware
- Student mobility

### 4. Industry Cooperation

- Industry Cooperation Board
- Roadmaps

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## EWSN 2006

ETH Zurich, Switzerland

Feb 13 – 15, 2006

[www.ewsn.org](http://www.ewsn.org)



Submission Deadline: Sept 12, 2005

**Have a nice stay!**



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