

**To register, please send a fax or e-mail containing the following information:**

**Delegate** (please use one registration form for each delegate)

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 Family name: \_\_\_\_\_ First name: \_\_\_\_\_  
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I have already transferred the registration fee to the given bank account.

## Organisation

### Program Committee

Prof. Dr. rer. nat. Appelrath  
 Prof. Dr. techn. Boll  
 Prof. Dr.-Ing. Jobmann  
 Prof. Dr.-Ing. Kürner  
 Prof. Dr.-Ing. Kyamakya  
 Prof. Dr.-Ing. Liedtke  
 Prof. Dr.-Ing. Martin  
 Prof. Dr.-Ing. Musmann  
 Prof. Dr.-Ing. Ostermann  
 Prof. Dr.-Ing. Reimers

### Registration Fees

Full Registration	200 €
Author	150 €
Student (non graduated)	50 €

### Bank Account

Name: FB E-Technik, Universitaet Hannover  
 Account Number: 101 427 060  
 Name of Bank: NORD LB  
 BLZ: 250 500 00  
 EBAN: DE71 2505 0000 0101 4270 60  
 SWIFT: NOLADE2H  
 Subject: Positioning Workshop WPNC04

### Contact

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COMPETENCE CENTER OF LOWER SAXONY  
 FOR INFORMATION SYSTEMS FOR MOBILE USAGE



## 1st Workshop on Positioning, Navigation and Communication 2004

26th March 2004, right after CEBIT '04

Location: University of Hannover  
 Information Technology Laboratory  
 Schneiderberg 32  
 30167 Hannover, Germany



WPNC '04

Morning Session 09:00-11:45

Mobile Systems based on state-of-the-art wireless technologies and all-new terminals are getting more and more important. When developing systems of this kind, problems of various fields of IT and communications technology need to be solved.

In the scope of the workshop an overview shall be given about state-of-the-art approaches on positioning, navigation and communication.

**Chairman:**

Prof. Dr. techn. Boll

**Welcome**

Prof. Dr.-Ing. Jobmann

**Keynote Address**

Prof. Dr.-Ing. Reimers (NICCIMON Speaker)

**guidePORT: A Museum guidance system**

J. Peissig, W. Niehoff  
Sennheiser electronic GmbH & Co. KG, Germany

**Navigation for Vehicles, Bicycles, and Pedestrians**

T. Schöberl, S. Baumann, C. Reinhard  
Robert Bosch GmbH, Telematica e.K., 3Soft, Germany

**UWB - a context-aware system perspective**

J. Smit  
Ubisense Limited, U.K.

**Local Positioning Radar**

L. Wiebking, L. Reindl, M. Christmann, D. Mastela, M. Vossiek  
Institute of Microsystems, Freiburg, Germany  
Siemens AG, Germany

WPNC '04  
Poster Session 12:30-13:30

**Chairman:** H. Scheibner

UbiLoc: A System for Locating Mobile Devices using Mobile Devices, *F. Alcalá et al.*

Use of Position Information of Nodes in Mobile Ad hoc Networks, *F. Erbas et al.*

Integration of Indoor Positioning into a Global Location Platform, *M. Zündt et al.*

Fuzzy Hopfield Neural Network Approach to the Channel Assignment Problem, *Y. Shen et al.*

New Consideration of the Distributed Computing Applications, *H. Yu et al.*

Location-Based Geodata Broadcasting, *J. Baldzer et al.*

Mobile Guide For The Enterprise, *C. Schmitt*

High-Precision Ad-Hoc Indoor Positioning in Challenging Industrial Environments, *J. Benson et al.*

A distributed framework for location sensing systems, *P. Röder et al.*

A Localization System using Wireless Network Sensors: A Comparison of Two Techniques, *M. Terwilliger et al.*

Hybridisation of mobile terminal positioning techniques; an engine for Location Based Applications and Services, *A. Clarkson et al.*

On the Reliability of Location based Networking, *M. Siebert et al.*

Two Approaches For Successful Mapping GPS Data To Underlying Road Network In Location-based Services, *M. Meratnia*

Developing A Real Time RSSI-Based Mobile Positioning System, *I. Adusei et al.*

mobGPS - Internet-based low-cost navigation for mobiles, *S. Kreiensen et al.*

An Improved Spatially Aware Routing Algorithm for Mobile Ad Hoc Network in Inter-Vehicle Communication, *L. Han*

Ad-hoc Positioning for Ocean Sensor Networks, *J. Garcia*

WPNC '04  
Afternoon Session 13:30-15:45

**Track A: Positioning and Navigation**

**Chairman:** Prof. Dr.-Ing. Kyamakya

**Optimization Of The "Coarse Grained Localization" Algorithm For Low Power In Wireless Sensor Networks**

J. Blumenthal, F. Reichenbach, M. Handy, D. Timmermann  
Institute of Applied Microelectronics and Computer Science, University of Rostock, Germany

**Bluetooth Indoor Localization System**

G. Fischer, B. Dietrich, F. Winkler  
IHP - Microelectronics, Frankfurt (Oder), Germany  
Humboldt University Berlin, Germany

**Grid-Based Navigation for Autonomous, Mobile Robots**

C. Buschmann, F. Müller, S. Fischer  
Institute of Operating Systems and Networks, Technical University of Braunschweig, Germany

**Limitations of range estimation in wireless LAN**

H. Velayos, G. Karlsson  
KTH, Royal Institute of Technology, Kista, Sweden

**Track B: Communication and Services**

**Chairman:** Prof. Dr.-Ing. Kürner

**Optimal Routing in Gossip Networks**

Y. Shavitt, A. Shay  
Tel Aviv University, Israel

**Applying Position Prediction as a Means for Performance-tuning in Location-aware Platforms**

A. Post, P. Langendörfer, R. Kraemer  
IHP - Microelectronics, Frankfurt (Oder), Germany

**A Platform for Location-Aware, Ad-hoc Collaboration in Wireless Networks**

O. Kao, U. Rerrer  
Department of Computer Science, Paderborn University, Germany

**Position-Aware Active Learning in Indoor Environment**

L. Chou, C. Lee, M. Lee, C. Chang  
Department of Computer Science and Information Engineering, National Central University, Chungli, Taoyuan, Taiwan