

## 3<sup>rd</sup> Workshop on Positioning, Navigation and Communication 2006 (WPNC'06)

### 16<sup>th</sup> March 2006

<b>Time</b>	<b>Program Morning Session</b>
08:00 - 09:00	<b>Registration (coffee &amp; light breakfast)</b>
	<b>Morning Session</b> <i>Chair: Prof. Dr.-Ing. K. Jobmann</i>
09:00 – 09:10	<b>Welcome Speech:</b> <i>Prof. Dr.-Ing. K. Jobmann</i>
09:10 – 09:30	<b>Keynote Address</b> <i>Prof. Dr.-Ing. Kaiser</i>
09:30 – 9:50	UWB Geo-Regioning - Algorithm and Performance <i>F. Althaus, C. Steiner, A. Wittneben</i> Communication Technology Laboratory Swiss Federal Institute of Technology Zurich
09:50 – 10:10	Performance and Accuracy Test of the WLAN Indoor Positioning System "ipos" <i>G. Retscher, E. Moser, D. Vredeveld, D. Heberling</i> Institute of Geodesy and Geophysics, Vienna University of Technology IMST GmbH, Germany
10:10 – 10:45	<b>Coffee Break</b>
10:45 – 11:05	Enhanced Code Acquisition in Global Positioning Radio Systems <i>F. Benedetto, G. Giunta, A. Neri, L. Vandendorpe</i> Digital Signal Processing and Multimedia Communications Laboratory, University of Roma, Italy Communications and Remote Sensing Laboratory Université catholique de Louvain, Belgium
11:05 – 11:25	Pedestrian Dead Reckoning: A Basis for Personal Positioning <i>S. Beauregard, H. Haas</i> School of Engineering and Science, International University Bremen, Germany
11:25 – 11:45	A new Particle Filter for Localization of a Mobile Base Station Based on Microwave Backscatter <i>H. Qasem, C. Ament, L. Reindl</i> Institute of Microsystems Technology, Freiburg University, Germany
11:45 – 12:15	<b>Poster Teaser</b>
12:15 – 14:00	<b>Light Lunch</b>

Time	Program Afternoon Session	
13:00 – 14:00	<b>Poster Session</b> <i>Chair: H. Scheibner</i>	
	<b>Track A</b> <i>Chair: Prof. Dr.-Ing. K. Kyamakya</i>	<b>Track B</b> <i>Chair: Prof. Dr. techn. S. Boll</i>
14:00 – 14:20	On Impact of Topology and Cost Function on LSE Position Determination in Wireless Networks  <i>V. Dizdarević, K. Witrisal</i> SPSC Laboratory Graz University of Technology, Austria	Local Positioning with Parallelepiped Moving Grid  <i>N. Sirola, S. Ali-Löytty</i> Tampere University of Technology, Finland
14:20 – 14:40	On the Applicability of Deterministic Modelling to Indoor UWB Channels  <i>J. Jemai, P. Eggers,</i> <i>G. F. Pedersen, T. Kürner</i> Institute for Communications Technology, Braunschweig Technical University Center for PersonKommunikation, Aalborg University, Denmark	Particle Filtering of Database assisted Positioning Estimates using a novel Similarity Measure for GSM Signal Power Level Measurements  <i>S. Peschke, R. Haeb-Umbach</i> University of Paderborn, Germany
14:40 – 15:00	Indoor Positioning with UWB Beamforming  <i>C. Seeger, T. Kaiser</i> University of Duisburg-Essen, Germany	Dynamic GPS-position correction for mobile pedestrian navigation and Orientation  <i>J. D. Martin, J. Krösche, S. Boll</i> University of Oldenburg, Germany Upper Austria University of Applied Sciences, Hagenberg, Austria OFFIS, Germany
15:00 – 15:40	<b>Coffee Break &amp; Snacks</b>	
15:40 – 16:00	WLAN Indoor Positioning Based on Euclidean Distances and Fuzzy Logic  <i>A. Teuber, B. Eissfeller</i> Institute of Geodesy and Navigation, University FAF Munich, Germany	Field trial on GPS Accuracy in a medium size city:  The influence of built-up  <i>M. Modsching, R. Kramer, K. ten Hagen</i> University of Applied Sciences Zittau/Görlitz, Germany
16:00 – 16:20	Propagation Delay Based Positioning Using IEEE 802.11b Signals  <i>G. Rahmatollahi, S. Galler,</i> <i>J. Schroeder, et al.</i> Institute of Communications Engineering University of Hannover, Germany	Blind Localization of 3G Mobile Terminals in Multipath Scenarios  <i>V. Algeier, B. Demissie, W. Koch, et al.</i> Ilmenau University of Technology, Germany Research Institute for Communication, Information Processing and Ergonomics, Germany
16:20 – 16:30	<b>Closing</b>	
16:30 –	<b>Cold Beer Session</b>	

**3<sup>rd</sup> Workshop on Positioning, Navigation and  
Communication 2006 (WPNC'06)**  
**16<sup>th</sup> March 2006**

**Program  
Poster Session**

*Chair: H. Scheibner*

Replication of local road networks for regional information dissemination in VANETS  
*B. Roessler, C. Bruns*

Low-Cost Sonic-Based Indoor Localization for Mobile Robots  
*D. Wehden, R. Salomon, M. Schneider*

Closer to Reality: Simulating Localization Algorithms Considering Defective Observations in Wireless Sensor Networks  
*F. Reichenbach, M. Koch, D. Timmermann*

Complexity Considerations for Unambiguous Acquisition of Galileo Signals  
*A. Burian, E. S. Lohan, V. Lehtinen, M. Renfors*

Algorithms for Audiovisual Speaker Localisation in Reverberant Acoustic Environments  
*C. Voges, V. Märgner, R. Martin*

An improved simulation model for Nakagami-m fading channels for satellite positioning applications  
*E. Pajala, T. Isotalo, A. Lakhzouri, E. S. Lohan*

Pre-processing of Data in RSS Signature-Based Localization  
*C. M. Takenga, K. Kyamakya*

The Design of Embedded GPS Navigation System Based on Internet Structure  
*S. Chen, F. Kao*

On the Polarization Diversity Performance of Log.-Per. Multiarm-Antennas for MBOFDM UWB Communications  
*O. Klemp, G. Armbrecht, H. Eul*

An Optical Indoor Positioning System for the Mass Market  
*O. Maye, J. Schaeffner, M. Maaser*

An Indoor Localization System Based on DTDOA for Different Wireless LAN Systems  
*F. Winkler, E. Fischer, E. Grass, P. Langendörfer*

Precise Positioning in Realtime using Navigation Satellites and Telecommunication  
*A. Rietdorf, C. Daub, P. Loef*