



# Call for Papers

## 9<sup>th</sup> Workshop on Positioning, Navigation and Communication 2012 (WPNC'12)

**Location: Dresden, Germany**

**March 15-16, 2012**

### General Co-Chairs

Giuseppe Abreu, Jacobs University Bremen, Germany  
Sven Zeisberg, HTW Dresden, Germany

### TPC Co-Chairs

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Tolga Eren, Kirikkale University, Turkey  
Youssef Nasser, American University of Beirut, Lebanon

### Scope

Localization is touching every aspect of our everyday life. Advanced location aware services are enabled by ranging and positioning techniques attracting great attention from scientists and industry alike. Recent advances in heterogeneous sensor fusion, p2p-networks, context awareness, privacy and security are enabling new system solutions and bring in new challenges to be solved at the same time. WPNC, the premier event on Positioning and Navigation in Europe, continues to provide an international platform for exchanging latest research results and inputs from the industry. Be part of the positioning revolution and submit your original contribution to WPNC 2012.

### Awards

Best WPNC2012 Paper - Best WPNC2012 Student Paper – Best WPNC2012 Demo

### Topics

Authors are invited to submit papers presenting scientific work, practical implementations or application scenarios addressing, but not limited to the following topics:

#### Context awareness in localization

Semantic localization  
Location and behavior modeling  
Cognitive position

Simultaneous localization and mapping  
Localization in sensor networks

#### Ranging/Positioning techniques

RFID based approaches  
Active & passive object tracking  
Ultra-sound ranging  
UWB ranging / UWB imaging

Inertial Data fusion techniques  
Underwater localization  
Propagation issues & antennas  
Cooperative localization

#### Navigation

Pedestrian/special forces navigation  
Asset tracking

Vehicle and robot navigation  
Industrial process automation

#### Localization related R&D projects

Localization for the Internet of Things  
UWB ranging techniques

Positioning techniques  
Location-aided communications

#### Location aided Communication and Applications

Localization in robotics and automotive  
Integrated positioning & communication

Local/Global application scenarios  
Health, public transport, M2M, Smart Grid

#### Robust and Secure Positioning

Privacy in localization  
Secure ranging and localization  
Anti-jamming techniques

Location based security  
Fundamental limits of secure positioning  
Outlier/NLOS robustness

#### Energy efficient localization

Complexity reduction  
Traffic reduction

Energy-accuracy trade-off  
Energy harvesting for localization

### Submission Guidelines

**Full Papers** (max. 6 pages) or **Extended Abstracts** (2-5 pages) may be submitted electronically in **PDF-format** in English language to <http://wpnc12.trackchair.com> until 22<sup>nd</sup> of January 2012. The workshop proceedings will be published electronically on data storage device and online in the IEEE Xplore database.

### Technical Exhibitions and Demonstrations

Technical exhibitions and demonstrations addressing the workshop's scope are welcome. For further details, please contact [info@wpnc.net](mailto:info@wpnc.net) or call/SMS directly +49 163 1493489.

### Important Dates

Submission of **Full Papers/Extended Abstracts**: **extended to January 22nd, 2012**  
Notification of acceptance: **January 27th, 2012**  
Submission of Camera Ready Manuscripts until: **February 26th, 2012**