



Call for Papers

12th Workshop on Positioning, Navigation and Communications (WPNC'15)

Location: Dresden, Germany

Date: March 11-12, 2015

General Co-Chairs

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

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Scope

Seamless access to location information of objects is bearing the potential to enable a rich environment of new or significantly enhanced applications in numerous areas like logistics, traffic engineering, industrial production, retail, office and home automation, ambient assisted living, convenience, luxury, security and many more. In particular the Internet of Things related developments are recently driving various advances in heterogeneous sensor data processing, fusion, energy efficient networking and cooperation, context awareness, highly automated information gathering and processing, privacy and security. Most of them being much more efficient incorporating location information and energy efficient radio communications. WPNC, the annual European event on Positioning and Navigation and energy efficient radio communications, continues to provide an international open platform for exchanging latest research results and inputs from the industry. **Be part of the seamless wireless ranging and positioning as well as energy efficient wireless networking revolution and submit your original contribution to WPNC 2015.**

Awards

Best WPNC2015: Paper - Student Paper – Demonstration

Topics

Authors are invited to submit contributions presenting scientific results, experimental and field trial system implementation evaluations addressing, but not limited to the following topics:

Positioning and Navigation in Cyber-Physical Systems

Localization and Navigation for CPS
MAC Architectures for CPS Localization
Pedestrian/special forces navigation
Asset tracking

Positioning in Large Scale CPS
Location-based Control in CPS
Vehicle and robot navigation
Industrial process automation

Context awareness in localization

Semantic localization
Location and behavior modeling
Localization for the Internet of Things

Simultaneous localization and mapping
Localization in autonomous networks
Cognitive positioning

Ranging and Positioning techniques

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

Positioning techniques
Inertial data positioning & fusion techniques
Underwater localization
Propagation issues & antennas
Cooperative localization

Location aided Communication and Applications

Localization in robotics and automotive
Integrated positioning & communication

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

Robust and Secure Positioning

Privacy in and security by localization
Secure ranging and localization

Outlier/NLOS robustness
Fundamental limits of secure positioning

Energy efficient localization and radio communication

Energy-accuracy and agility trade-off
Dedicated energy saving radio protocols

Energy harvesting
Asymmetric communications

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://wpnc2015.trackchair.com> until **11th of January 2015**. All accepted papers will be submitted for publication to IEEE Xplore.

Technical Exhibitions and Demonstrations

Technical exhibitions and demonstrations addressing the workshop's scope are welcome. For further details, please contact info@wpnc.net or call/SMS directly to +49 172 3061498.

Important Dates

Submission of **Full Papers/Extended Abstracts**: **January 11th, 2015 (extended)**
Notification of acceptance: **January 29th, 2015 (extended)**
Submission of Camera Ready Manuscripts until: **March 01st, 2015 (extended)**