

SmartCom 2017

2017 International Workshop on Smart Wireless Communications
Oct. 23-24, 2017, Grand Hotel Palatino, Rome, Italy

SmartCom 2017 Call For Papers and Exhibitions



Organizer: IEICE Technical Committee on Smart Radio (SR), IEICE Technical Committee on Short Range Wireless Communications (SRW) and IEICE Technical Committee on Radio Communication Systems (RCS).
Technical Sponsor: IEEE ComSoc Tokyo Joint Chapter, IEICE EU Section

Scope: SmartCom 2017 is a joint workshop between Europe and Japan on smart wireless communications, it covers radio technologies, spectrum management, wireless networks, communication theory, flexible hardware, and so on. Due to the recent advancement of wireless technology, mobile terminal and application, ubiquitous connectivity is expected in the future. However, this also leads to the tremendous growth of wireless data traffic, demanding higher data rates. Therefore, smart communication technologies to address this data demand are urgently required to sustain future wireless world. In this workshop, we discuss the solutions targeting not only near future but also years beyond 2020, e.g., 5G, beyond 5G and IoT (Internet of things). Expected candidate solutions include small cells, heterogeneous networks including microwave/millimeter wave devices, dynamic spectrum management, etc. The organizing committee wishes the workshop to provide a great opportunity for discussing future wireless world. It also represents a great opportunity for networking such as for initiating cooperative research and joint proposals. The topics covered by SmartCom 2017 include, but are not limited to:

Topics:

Heterogeneous wireless networks

- Ultra broadband small cell deployment
- C/U splitting, common pilot channel, mobility management
- Dynamic cell structuring, virtual cell, ghost cell, phantom cell
- Backhaul/fronthaul architecture, cloud-RAN, centralized-RAN
- Cloud cooperated radio resource control, energy saving, wake-up

Cognitive radio networks and dynamic spectrum management

- Spectrum sensing and measurement
- MAC and networking protocols
- Applications and services based on TV white space/cognitive radio networks
- Standards, regulatory policies
- Green cognitive radio

Communication theory and its application

- Network information theory
- Coding theory

- Physical-layer security
- Compressed sensing
- Learning for wireless communication

Wireless distributed network, MAC protocol, and network management

- Cross layer wireless networks
- Wireless LAN, sensor networks, and mesh networks
- High density wireless networks
- Wireless network virtualization and virtual network management
- Software defined networks (SDN)
- Intelligent transportation system (ITS)
- Intelligent and cooperative MAC protocol
- Network controlled D2D communication

Hardware architecture and implementations

- Broadband and multiband antennas
- Multiband and multimode RF/analog circuits
- Reconfigurable baseband circuits
- Implementation of testbeds

- and prototypes, especially for higher frequency bands including mmWave
- Wireless equipment for 5G, beyond 5G and IoT

Advanced wireless technologies

- Advanced MIMO, Massive MIMO
- Interference control, alignment, management techniques
- Full-duplex communications
- Advances in mmWave, terahertz (THz) wireless communication, and nano sensor networks
- Wireless power transfer
- Visible light communications
- Dynamic TDD
- Wireless sensing technologies and applications
- Radar signal processing

Technical exhibitions

- Implementation, prototype, and wireless equipment for smart radio
- Applications and related works of wireless communications

Special Sessions: TBD

Important Dates:

Registration of paper submission deadline
Camera-ready paper submission deadline
Participant registration deadline
Registration fee payment deadline

Sept. 30th, 2017 (Extended!!)
Oct. 2th, 2017
Oct. 16th, 2017
Oct. 24th, 2017

Registration of paper submission:

In SmartCom 2017, all regular papers will be presented in poster or technical exhibition sessions. Note that manuscripts will not be peer reviewed, and an available equipment in the technical exhibition sessions is strictly limited due to the limitation of power supply.

Contact Information:

Organizing co-chairs : sr_ac-smartcom2017-jp@mail.ieice.org

SmartCom 2017 Committees:

General co-chairs

- Sergio Barbarossa, University of Rome, Italy.
- Kenta Umehayashi, Tokyo University of Agriculture and Technology, Japan.

TPC co-chair

- Thomas Haustein, Fraunhofer HHI, Germany.
- Suguru Kameda, Tohoku University, Japan.
- Tadao Nakagawa, Tottori University, Japan.

Keynote session co-chair

- Calvanese Strinati Emilio, CEA-LETI, France
- Takeo Fujii, The University of Electro-Communications, Japan.

Special session co-chairs

- Koichi Adachi, The University of Electro-Communications, Japan.
- Kei Sakaguchi, Tokyo Institute of Technology, Japan.

Special session organizer

- Kazushi Muraoka, NEC, Japan.
- Hirokazu Sawada, NICT, Japan.

Poster/exhibition session co-chair

- Leonardo Goratti, CREATE-NET, Italy.
- Osamu Takyu, Shinshu University, Japan.

Financial co-chairs

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- Mamiko Inamori, Tokai University, Japan.
- Mai Ohta, Fukuoka University, Japan.
- Kazuto Yano, ATR, Japan.

Publication & Publicity co-chairs

- Koji Ishibashi, The University of Electro-Communications, Japan.
- Shusuke Narieda, National Institute of Technology, Akashi College, Japan.

Local Arrangement co-chairs

- Paolo Di Lorenzo, University of Rome, Italy.
- Teppei Ohayama, Fujitsu Laboratories LTD., Japan.
- Koji Oshima, KKE, Japan.

Organizing co-chairs

- Kentaro Ishizu, NICT, Japan.
- Gia Khanh Tran, Tokyo Institute of Technology, Japan.

Advisories

- Fumiyuki Adachi, Tohoku University, Japan.
- Markku Juntti, University of Oulu, Finland.
- Hiroshi Harada, Kyoto University, Japan.
- Yukitoshi Sanada, Keio University, Japan.
- Sun Sumei, I2R, Singapore.
- Kazuhiro Uehara, Okayama University, Japan.
- Masahiro Umehira, Ibaraki University, Japan.