

NEW2AN/ruSMART in St. Petersburg



The 17th NEW2AN/ruSMART 2017 will take place on August 28 - 30 in St. Petersburg (Russia). The proceedings will be published in Springer LNCS (approved) and indexed in relevant databases including Scopus.

- NEW2AN/ruSMART 2017 proceedings will be published in Springer's LNCS (approved) and indexed by relevant databases such as ISI, WoS (Web of Science), EI (Compendex and Inspec databases), ACM Digital Library, dblp, Google Scholar, Scopus etc.

- Submission deadline June 01, 2017

- Acceptance rate is 35% (5 years)

- Authors of selected best papers will be invited to submit extended versions of their papers to be published in a special issue of a journal TBA

About the Conference

Next-generation mobile networks will evolve out of existing wired and wireless networks of different nature by means of convergence, fusion and mutual penetration; next-generation multimedia services in turn pose new requirements and challenges on treatment of traffic within communication systems - a certain degree of multilayer co-operation has to be achieved. This forms a framework on harmonization of results obtained separately in different areas of network research like network performance evaluation, architecture and protocol design, and low layer network design. The conference goal is in the identification, investigation and integration of new algorithms, approaches, architectures, methods and mechanisms to enable proper and efficient operation of a next-generation IP-based wireless network. Therefore, wireless networks and their interaction with wired networks shall be widely examined and addressed throughout the conference. The proceedings will be published in LNCS, Springer (confirmed) and indexed by

relevant databases.

The history of NEW2AN dates back to 1993, today it is an established conference featured by proceedings published by Springer LNCS and distinguished keynote speakers. In 2008 NEW2AN promoted newly organized event on Internet of Things and Smart Spaces ruSMART ("are you SMART"). In NEW2AN and ruSMART will be organized again jointly thus allowing boosting of cross-discipline interactions.

The NEW2AN 2017 will be held in St. Petersburg, Russia - the meeting point of East and West. Through its stunning architecture and wonderful art galleries and museums, among a number of other attractions, the wealth of history of East and West can be seen and felt in this beautiful city.

NEW2AN is supported by the Government of St. Petersburg and regarded as very important part of scientific life of Russia.

Topics of interest include, but are not limited to:

Fundamentals and PHY

- Channel capacity estimation and equalization
- Channel measurement and modeling
- Cognitive and green radio
- Cooperative communications
- Interference mitigation
- Multi-antenna signal processing
- Physical layer design
- Power efficient communications
- Advanced modulation schemes
- Antennas and beamforming
- Single and multi-user MIMO
- Source and channel coding
- Vehicular communications

MAC design and Cross-Layering

- Adaptive and cognitive MACs
- Cross-layer designs involving MAC
- Implementation of testbeds and prototypes
- Information-theoretical approaches to MAC designs
- Radio resource management, allocation, and scheduling
- Reconfigurable MACs
- Routing and QoS scheduling
- Scheduling algorithms for various systems
- Security issues in MAC designs

Fixed, Mobile and Wireless Networks

- Beyond 4G and 5G
- Next-Generation access networking
- Ad hoc networks
- Body area networks
- Cognitive radio networks
- Congestion, load and admission control
- Future wireless Internet
- Internet of things
- Mobile computing
- Multi-hop and relay networks
- Future Internet and Next-Generation Networking Architectures
- Satellite communications
- Smart cities and smart grids
- Vehicular networks

- Wireless sensor networks
- Network virtualization, virtual private networks (VPN), and services
- Network management methodologies and control plane design for Future Internet
- Next generation network provisioning, monitoring, and management of IP services: traffic engineering, and mobility support

Services and Applications

- Emerging Internet applications
- Authentication, authorization and accounting
- Context and location-awareness in pervasive systems
- Cyber-physical systems and applications
- Emerging wireless and mobile applications
- P2P services for multimedia
- Secure network and service access
- Self-adaptation on the service layer
- Service discovery and portability
- Service oriented architectures and cloud computing
- User interfaces, user-machine interactions
- Project management in communications industry

Nano Communications

- Nano-Electromagnetic communications
- Graphene-based nano-antennas
- Terahertz Band communication
- Nanomaterials for applications in communications
- Molecular communications
- Protocols and architectures for nano communications

- Information theoretical approaches to nanoscale communications
- Internet of Nano Things (IoNT)
- Privacy, Security and Trust in nanonetworks
- Future emerging applications of nano/molecular communications