International conference NEW2AN 2018

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 NEW2AN 2018 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.

Important Dates

Full paper submission: June 1, 2018
Notification of acceptance: June 06, 2018
Camera ready version: June 20, 2018

Topics of interest

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 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

Paper submission

The authors are encouraged to submit full papers describing original, previously unpublished, complete research, not currently under review by another conference or journal, addressing state-of-the-art research and development in all areas of computer networking and data communications. All papers will be reviewed and accepted papers will appear in the conference

proceedings, published by Springer-Verlag in the LNCS series. Papers must be submitted electronically in the conference site. The maximum size of papers should be 5000 words including tables and figures. Please adhere to the formatting standard for a 12-page manuscript of Springer-Verlag LNCS. The cover page must contain an abstract of about 150 words, 3-5 keywords, name and affiliation of author(s) as well as the corresponding author's e-mail and postal address. Selected best papers will appear in a journal special issue.

For further and up-to-date information please visit official web page of the Conference http://www.new2an.org