



IEEE International Conference on Communications
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Empowering Intelligent Communications

CALL FOR PAPERS

OPTICAL NETWORKS AND SYSTEMS (ONS) SYMPOSIUM

Symposium Co-Chairs

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Scope and Topics of Interest

Today, there is a quest to maximize efficiency, utilization of resources, flexibility, agility, reliability, and service scalability. Mobile applications, high-definition video streaming, social networking, cloud-based storage and services, smart grids, big data, and Internet of Things (IoT) are some of the drivers of today's research on optical systems and networks. Developments in software defined networking (SDN) and network function virtualization (NFV) are also redefining traditional paradigms and impacting the optical networking landscape.

As a result, optical systems and networks technologies are evolving to meet numerous new research and development challenges. Progress in optical components capabilities, optical transmission, optical switching, and control are paving the way for a very promising return and rise of optical networking in the foreseeable future. Hence this symposium seeks to present the latest developments in all areas of optical networks and systems research. Topics of interest include, but are not limited to, the following:

- Optical technologies, components, and sub-systems for telecom networks
- Optical modulation and signal processing
- Optical transmission systems and performance monitoring
- Optical wavelength-division, time-division, and code-division multiplexing (WDM, OTDM, OCDM)
- Elastic and flexible grid optical networks
- Optical switching technologies, devices, and architectures
- Optical cross-connects (OXC)s
- Optical add/drop multiplexers (OADMs)
- Optical access networks (PONs, AONs, and FTTx architectures)
- Free space optical (FSO) communications and networks
- Software defined networking (SDN) for optical networks
- Optical network control
- Network function virtualization (NFV) in optical networks
- Optical virtual private networks (O-VPN), optical cloud networks, optical datacenter networks
- Impact of physical-layer impairments and non-linearities on optical network design
- Routing and wavelength assignment and spectrum management
- Traffic grooming and engineering in optical networks
- Multi-casting in optical networks
- Protection and restoration, survivability and disaster recovery in optical networks
- Energy-efficient in optical networks and systems
- Optical networks and systems for big data and cloud applications

- Optical networks and systems for IoT and smart grids
- Optical networks security concerns
- Optical network management
- Optical network demonstrations, test-beds and field trials
- Optical network and system standards
- Optical wireless convergence
- Free space optical communications and networking
- Lighting constrained visible light communications and networks
- Ultraviolet communications and networks
- Underwater optical communications
- Innovations in optical X-haul networks and fixed-mobile convergence
- Multi-layer and Multi-domain optical network design and operations
- Compressed Sensing for Optical Systems
- Techno-economic analysis
- Optical networking in 5G systems
- Optical networks and edge computing

Submission Guidelines

The IEEE ICC 2019 website provides full instructions on how to submit papers and the paper format.

You will select the desired symposium when submitting papers.

The paper submission deadline is October 14, 2018.

Only PDF files will be accepted for the review process and all submissions must be done through EDAS at <http://edas.info/>