ONDM 2018
22nd Conference on Optical Network Design and Modelling
Dublin, Ireland

Call for Papers

Following the tradition of previous editions, ONDM 2018 (https://ondm2018.scss.tcd.ie) will address cutting-edge research in established areas of optical networking as well as their adoption in support of a wide variety of new services and applications. This involves the most recent trends in networking including 5G as a new end-to-end network vision, big data, cloud, content delivery, artificial intelligence etc. that drive the need for increased capacity, efficiency, flexibility and adaptability in the functions that the network can perform. These can be achieved developing new network architectures, exploiting and integrating novel technology solutions as well as adopting open hardware and software platforms such as software defined networking (SDN), and network function virtualization (NFV) to allow support of new business models and opportunities. In this context, the scope of the conference includes but is not limited to the following topics:

- Novel optical network architectures
- Optical network control, management and orchestration including SDN and NFV solutions
- Slicing, virtualisation and multi-tenancy techniques for optical networks
- Optical local/access/metro network solutions in support of 5G infrastructures
- Optical and wireless network convergence
- Optical networks in support of intra- / inter-data center connectivity and cloud computing
- Machine learning techniques for optical networks
- Advances in optical network modelling and optimisation
- Routing and spectrum assignment in fixed and flex-grid optical networks
- Novel optical node designs including disaggregation and open optical line systems
- Optical networks exploiting photonic integrated circuits
- Energy efficiency in optical networks
- Optical network availability, resilience and survivability
- Security and privacy in optical networks
- Architectures and solutions for quantum key distribution and post-quantum security
- Optical networking in support of vertical industries such as transportation, power grids, etc.
- Techno-economic studies of optical networks

Authors are encouraged to submit full papers (max. 6 pages in standard IEEE conference style) describing original, unpublished research results, not currently under review, addressing forefront research and development in the area of optical network design and modelling.

IMPORTANT DATES:

Submission Deadline: January 8, 2018	Camera Ready Submission: March 31, 2018
Acceptance Notification: March 8, 2018	Conference Dates: May 14-17, 2018

General Chair:
Marco Ruffini – CONNECT research centre, The University of Dublin, Trinity College, Ireland

TPC Chairs:
Anna Tzanakaki – University of Athens, Greece and University of Bristol, U.K.
Ramon Casellas – CTTC, Barcelona, Spain
Achim Autenrieth – ADVA Optical Networking, Germany

Steering Committee:

Dimitra Simeonidou – University of Bristol, UK	Piero Castoldi – SSSA, Italy
Philippe Gravey – Telecom Bretagne, France	Pablo Pavón Mariño – UPCT, Spain
Lena Wosinska – KTH, Sweden	Tibor Cinkler – BME, Hungary