



FutuRe Optical Networking - FRONT

Co-located with 14th IEEE/IET *International Symposium on COMMUNICATION SYSTEMS, NETWORKS & DIGITAL SIGNAL PROCESSING (CSNDSP'24)*
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Colloquium organizers



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<https://comlab.uniroma3.it/CSNDSP2024.php>

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Dr. Dimitris Klonidis (*Ubitech*)

Future generations of fixed networks will necessitate significant advances in several aspects of optical network technology. This Colloquium is dedicated to discovering technologies that enable progress towards the following generations and researching architectural adjustments necessary to manage future demands and use cases. The objective is to allow a revolution in fixed network technology, leading to huge Fiber-To-The-Everywhere/Everything (FTTE) networks that can support new service categories, that can reach new markets and end users. In this time of transition and post-pandemics, our objective is to renew our academic dialogue in a casual setting, freely discussing future communications technologies and reconnecting with peers, in a type of Academic Salon. This Research Colloquium is open to renowned academics and industry specialists in the subject.

According to the above, the topics of primary interest include:

- Low-cost transceivers
- Novel optical nodes
- Optical components for the support of UWB/SDM
- Network-wide modelling and optimization methods
- Edge computing and smart industrial IoT architectures in optical networks
- Network autopilot, AI-based network automation
- Low power consumption digital signal processing
- Programmable photonics
- New fibre, Si-Photonics, MultiChip Modules, cutting-edge materials and processes
- Technologies for RF & Free-Space optics applications
- International Standardization activities and other forums
- Quantum technologies, systems and networks

Talks will be organized in 2 groups/sessions:

1. NOVEL OPTICAL TECHNOLOGIES.
2. NETWORK AUTOMATION AND OPTIMIZATION.

Submission Dates (*According to the general schedule of the CSNDSP 2024*)

For further information about this colloquium, please contact: [\[Co-Chairs emails\]](#)

For general information about the CSNDSP'22, please contact: [Dr Anna Maria Vegni \(annamaria.vegni@uniroma3.it\)](#)