Biennial since 1998

CSNDSP 2022

2nd Colloquium on FRONT-EDGE – Future Optical Networking: The Edge

Co-located with 13th IEEE/IET *International Symposium on COMMUNICATION SYSTEMS, NETWORKS & DIGITAL SIGNAL PROCESSING (CSNDSP'22)*

20-22 July 2022, Porto, Portugal

Colloquium organizers

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Future generations of fixed networks will require major advancements in many areas of optical network technologies. This Colloquium is dedicated to identifying technologies that enable the evolution towards the next generations, while also investigating changes in architecture required to handle future needs and use cases. The goal being to enable a revolution of fixed network technology, towards massive Fiber-To-The-Everywhere/Everything (FTTE), expanding to new markets and applications. Our goal in this time of changes and post-pandemics is to rekindle our academic discourse in a relaxed atmosphere, openly discussing about future communications technologies and reconnect with colleagues, in a kind of Academic Salon as we may call it. Renowned academics and industry experts in the field are invited to participate at this Research Colloquium.

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

- Application-driven edge networking use cases.
- Innovative Point-to-Multipoint and LAN architectures and key technologies.
- Core-edge convergent applications.
- Edge computing and smart industrial IoT architectures in optical networks.
- Network autopilot, AI based network automation for optical networks.
- "Lite" and/or low power consumption digital signal processing.
- Low cost coherent, including access network, metro, DCN/DCI transceivers.
- FMC (Fixed and Mobile Convergence): transparent wideband Radio-over-Fibre, optical wireless and free space optics, millimetre and THz wave backhauling.
- New fibre, Si-Photonics, MultiChip Modules, cutting edge materials and processes.
- Ubiquitous ultra-dense spectrum management.
- International Standardization activities and other forums.

Talks will be organized in 3 groups/sessions:

1. **NEW EDGE APPLICATION USE CASES.**
2. **DSP&TRANSMISSION IN EDGE/ACCESS.**
3. **ENABLING TECHNOLOGIES.**

Submission Dates: *According to the general schedule of the CSNDSP 2022*

For further information about this colloquium, please contact: Prof. Josep Prat *(josep.prat@upc.edu)*