

Workshop on Digital Signal Processing in Optical Fiber Communication

The REAL-NET and FONTE consortiums organize the Workshop on Digital Signal Processing in Optical Fiber Communication.

The workshop will bring together researchers from the fields of *optical fiber transmission*, *digital signal processing* (DSP) and *machine learning*, to discuss advances in digital communication over optical fiber. The focus is on equalization of channel impairments, hardware implementation of DSP algorithms and transceiver design based on neural networks. The workshop should promote interaction and collaboration among the participants from academia and industry.

Topics of interest

- Equalization in optical fiber communication
- DSP in fiber-optic transmission
- Hardware implementation of communication algorithms
- Transceiver design based on neural networks

Date and format

The workshop will be held on October 25, 2021 in a hybrid format. Participants may attend online, or give presentations physically at Telecom Paris which will be broadcast in realtime (a health pass showing proof of vaccination is required in France). The Workshop is Open-To-All and there is no registration fee.

Confirmed speakers

- Sebastian Randel (Karlsruhe Institute of Technology)
- Christian Hager (Chalmers University)
- Laurent Schmalen (Karlsruhe Institute of Technology)

Organizers

The workshop is jointly organized by two European collaborative projects funded by the European Commission. *REAL-NET* is an H2020 MSCA-ITN-EID project, including AITP at Aston University (coordinator), Telecom Paris, U. Politècnica de Catalunya, and the industry partners Infinera Germany and Orange France. *FONTE* is an H2020 MSCA-ITN-EID project, led by AITP at Aston University (coordinator), Telecom Paris, TU Delft, TU Denmark and the industry partner Nokia Bell-Labs Germany.

The objective of these projects is to develop signal processing and communication algorithms suitable for non-linear optical fiber. For further information, see real-net.astonphotonics.uk and fonte.astonphotonics.uk.

Audience

The workshop will be attended by senior researchers, as well as postdocs and PhD students in optical communication. It will also be advertised at graduate programs in photonics at partner institutions. The audience is mix of senior and early state researchers (ESRs), with knowledge in optical fiber communication and photonics. A goal of the workshop is to provide an overview of topics of interest to ESRs, to help with their career development.

Registration and website

For registration, visit the project website by clicking [here](#) or scanning this barcode.

- Contact: Mansoor Yousefi (yousefi@telecom-paris.fr)
- Registration by email: Natalia Manuilovich (n.manuilovich@aston.ac.uk)

