Complex Networks and Telecommunications : Third Edition
Lake Como School of Advanced Studies - 27 July 2021

Home

Complex networks and telecommunications
3rd edition: Towards 6G

Following the tradition of the successful previous editions, this biannual event aims at representing a landmark in the dissemination of current results and trends in new telecommunications systems. The goal is to expose the participants to a wide range of topics, forming a system view of the evolving scenario.

Topics covered will therefore cover the constraints and opportunities provided by novel radio access techniques but also

This edition of the school will bring together recognized experts which will be able to provide insights on the future trends and the most relevant research topics. As such, it will provide a unique opportunity for young researchers but also for experienced ones willing to challenge themselves with the friendly and interactive atmosphere provided by the location.

The promise of nextG systems is to support seamless and realistic human communications as well as massive machine communications enabling services in support of a better life. The 5G system will not only increase the data rate or extend coverage although those will remain fundamental aspects. Exploitation of new frequency bands and novel transmission techniques will have to be matched with distributed smart control techniques able to somehow anticipate user needs to reduce latency and adapt to the varying requirement and mixes. 6G will not only be related to freeing data around but will require the integration of sensing, localization, mobility management in the distributed control engine calling for the need of an infrastructurally secure and privacy preserving eco-system.

Speakers are selected among some of the top researchers in the area as well as from ongoing Horizon Europe projects, providing an up to date transdisciplinary vision of the fundamental tools towards this vision

School organizing committee

Favalli, Lorenzo, Associate Professor, University of Pavia, Italy, email: lorenzo.favalli@unipv.it
Cavallo, Enrico, Smart Devices & Telecom. Strategy Program, Director Internet Research Programs, CEA-Leti, MNATEC, email: cavallo-enrico@cea.fr
Zardi, Michele, Full Professor, University of Padova, Italy, email: zardi@dei.unipd.it

Technical sponsors

Università di Pavia - Department of Electrical, Biomedical and Computer Engineering
Università di Padova - Department of Information Engineering
CEA Leti

Financial support

IEEE Communications Society
CEA Leti
Fondazione Alessandro Volta
Lake Como School of Advanced Studies
School Organization

The school will cover some selected hot topics in the evolution of telecommunications networks. All speakers have worldwide recognition of being at the top in their fields so as the event is projected to be of a very high level.

Every speaker is assigned a ‘slot’ with three slots/day plus one fourth slot left for students presentations. Students are invited to propose their own presentations which will be possibly grouped according with the topic of the day to maximize interaction with the speakers.

We will have a half day on Monday afternoon with introductory topics and trends at large. The remaining three and a half days will be centered respectively on

- Semantic and goal-oriented communications: this novel paradigm tends to move beyond the traditional agnostic representation and transport of information, mimicking the process of human cognition and communication.
- Distributed and edge-intelligence: as in a biological nervous system, decentralized reasoning brings reaction close to the network periphery. This model not only reduces latency but paves the way to a new paradigm where not only intelligence aids network management, but the network itself enables new forms of reasoning.
- Novel access techniques: this more ‘traditional’ networking approach covers several advances in materials, technology, and architecture. Topics covered under this stream will be massive and holographic MIMO, Reconfigurable Intelligent Surfaces, joint localization and sensing, integrated terrestrial and non-terrestrial networks, and the exploitation of very high (THz) frequencies.

Slots will be reserved for attendees willing to discuss their research activity.

On Friday afternoon an exam will be organized for all those who will need credits.

If you need any detail or support, please see the contact page.
Complex Networks and Telecommunications: Third Edition

Lake Como School of Advanced Studies - 3-7 July 2023

Protetto: Course Material
Il contenuto è protetto da password. Per visualizzarlo inserisci di seguito la password.

Password: [Input Field]  

< Back to Lake Como School of Advanced Studies
Complex Networks and Telecommunications: Third Edition

Lake Como School of Advanced Studies - 3-7 July 2023

Photo's

LINK FOTO # 1

LINK FOTO # 2

PRINT