REPORT

The Summer School brought together world-renowned researchers from academia and industry who shared their expert knowledge on the latest theoretical and algorithmic advances in machine learning and signal processing as applied to communications. This event provided insights on advances in network and data sciences, ranging from learning graph representations of complex signals, mobile edge computing, to learning efficient signal representations via state-of-the-art deep learning architectures. The concepts covered have been demonstrated through diverse applications (IoT, mobile networks and edge computing, ultra-reliable wireless communications, mmWave communications, semantic communications, etc.). An experimental session with IoT devices has been performed. The material was presented in an interactive and stimulating way: each day, during and after the lectures, the speakers were available for a face-to-face discussion with the participants. Participants also had the opportunity to present their own research work and received feedback from other participants as well as from the lecturers. The School was organized as an “in-person” event only.

The School brought together more than 60 students from all over the Europe and USA, and 10 world-renowned lecturers: Paolo Banelli (University of Perugia, Italy), Georgios B. Giannakis (University of Minnesota, USA), Geert Leus (Delft University of Technology, The Netherlands), Geoffrey Ye Li (Imperial College London, United Kingdom), Gonzalo Mateos (University of Rochester, USA), Petar Popovski (Aalborg University, Denmark), Ljubisa Stankovic (University of Montenegro), Andrea M. Tonello (University of Klagenfurt, Austria), Dejan Vukobratovic (University of Novi Sad, Serbia), Thomas Watteyne (Inria, Paris, France). The Organizers: Gordana Gardašević (Faculty of Electrical Engineering, University of Banja Luka, Bosnia and Herzegovina), Danilo Mandić (Imperial College, London, United Kingdom), Petar M. Djurić (Stony Brook University, Stony Brook, NY, USA).