A high level perspective on 5G technologies and applications

While the design of 3G and 4G systems was mainly addressed to provide higher bitrates to mobile users, with 5G the perspective has been enlarged to a variety of application scenarios, including massive Internet of Things, Industry 4.0, Smart Cities, and so on. In this talk, we will make a journey in the 5G landscape, starting from the requirements of the new application domains, and then moving towards the technical solutions that have been proposed to satisfy such requirements. During this journey, we will touch upon concept like massive access, network densification, new radio, network virtualization and edge computing, each of which has basically open a new research trail. The roadblocks that still hinder the way to the full realization of the 5G vision will finally mark the end of our trip.

Prof. Andrea Zanella,
Human Inspired Technologies (HIT) Research Centre
Dep. of Information Engineering (DEI) - SIGNET research group
University of Padova
V. Gradenigo, 6/B 35131 Padova (Italy)

office: +39 049 8277770
fax   : +39 049 8277699
email: zanella@dei.unipd.it
web : http://www.dei.unipd.it/~zanella

Future Internet Security School
https://spritz.math.unipd.it/events/2019/PIU2019/PagesOutput/FIS/Program.html