



## **Enrico Buracchini**

**TIM, Turin**

### **Title “5G evolution: 3gpp steps, NPNs, ORAN”**

This keynote is addressing 5g evolution; in particular a brief survey on main R16 and R17 features dedicated to verticals is going to be addressed; NPN and ORAN architectures will be addressed with related advantages and challenges. TIM views and activities will be addressed as well.

#### **BIO**

Enrico Buracchini is currently 5G senior project manager into INNOVATION DEPT of TIM (former famous CSELT R&D labs)

Main activities:

- 5G and its evolution (e.g., rel16, 17 &18), & 6G
- 5G based I4.0 & NPN
- 3GPP RAN1 & ITU R 5D delegate.
- More than 500 presentations and business development for TOP/BUSINESS TIM clients
- 5G courses & training to all TIM personnel
- E2E network manager of TIM 5G SAN MARINO POC (March- November 2018), including mmW @26GHz.
- More than 26 years in wireless comms, managing several innovation projects on 3&4G and consultancy projects in former TIM foreign branches in Austrian A1 (lived in Wien 1 year), Spanish Amena and Greek TIM HELLAS



## **Davide Dardari**

**University of Bologna, Bologna**

### **Title “Localization assisted by large intelligent surfaces”**

Meta-materials represent an appealing technology to realize active large intelligent surfaces (LIS) and passive reflecting intelligent surfaces (RIS) enabling the recently introduced smart radio environments concept.

In this talk, the opportunities offered by LIS to make near-field localization possible, and by RIS to improve at low-cost the reliability of localization systems working in harsh propagation environments will be introduced.

Examples of signaling and positioning algorithms will be provided along with methods to design the RIS time-varying reflection coefficients. The trade-offs between bandwidth, overhead, operating frequency, and latency as well as future directions of the investigation will be discussed.

#### **BIO**

Davide Dardari is a Full Professor at the University of Bologna, Italy. He has been a Research Affiliate at the Massachusetts Institute of Technology, USA.

His interests are in wireless communications, smart radio environments, localization techniques and distributed signal processing. He published more than 250 technical papers and played several important roles in various National and European Projects.

He received the IEEE Aerospace and Electronic Systems Society's M. Barry Carlton Award (2011) and the IEEE Communications Society's Fred W. Ellersick Prize (2012).

He is Senior Member of the IEEE where he was the Chair of the Radio Communications Committee and Distinguished Lecturer (2018-2019) of the IEEE Communication Society.

He was co-General Chair of the 2011 IEEE International Conference on Ultra-Wideband and co-organizer of the IEEE International Workshop on Advances in Network Localization and Navigation (ANLN) - ICC 2013-2016 editions. He was also TPC Chair of IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC 2018), TPC co-Chair of the Wireless Communications Symposium of the 2007/2017 IEEE International Conference on Communications, and TPC co-Chair of the 2006 IEEE International Conference on Ultra-Wideband.

He served as an Editor for IEEE TRANSACTIONS ON WIRELESS COMMUNICATIONS from 2006 to 2012 and as Guest Editor for several Journals.