



## 2016 Tyrrhenian International Workshop on Digital Communications

## What Lies Beyond 5G?

LIVORNO, ITALY - September 12-14, 2016  
Call for Contributions

### General co-chairs

Marco Luise  
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### Technical Program Committee

Mehdi Bennis  
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### Publicity chair

Filippo Giannetti

### Publication chair

Carmine Vitiello

### Local arrangement

Andrea Pizzo

### Technical Program

The 2016 edition of the well-established series of Tyrrhenian Workshops (started in 1983) intends to setup an informal and highly interactive forum for researchers in the broad area of (cellular) wireless communications to share their insight and vision in the field, and to present key and emerging results on advanced technologies that may qualify as "Beyond 5G" (B5G). The 2016 edition of the TIW (<http://tyrr2016.cnit.it>) will be held at the Grand Hotel Palazzo, on the beachfront of Livorno, Tuscany, Italy. The TIW16 will feature world-class keynote speakers, and special sessions consisting of oral presentations. Dedicated tutorial afternoon sessions will be directed to young researchers and PhD students in one track, and to experienced researchers wishing to know more about ongoing large research projects and initiatives about (B)5G in the other. The presentations will be mainly given upon invitation from the Technical Program Committee. A few time slots are left available for proposals coming from this open call – see below for details. The authors of outstanding presentations will be invited to submit an *extended version* of their work to a special issue on "Beyond 5G" on the EURASIP Journal on Wireless Communications and Networking.

### Keynote Speakers

- Giuseppe Caire - *Technische Universität Berlin, Germany*
- Merouane Debbah - *Huawei Technologies, France*
- Mischa Dohler - *King's College London, UK*
- Gerhard Fettweis - *Technische Universität Dresden, Germany*
- David Gesbert - *EURECOM, France*
- Robert Heath - *The University of Texas at Austin, USA*
- Björn Ottersten - *University of Luxembourg*
- Petar Popovski - *Aalborg University, Denmark*

### Special Sessions

- *Advances and challenges in network virtualization and softwarization*
- *Wireless communications, networking, and positioning with unmanned aerial vehicles*
- *Simultaneous wireless information and power transfer*
- *Beyond 5G: more than "more data"*
- *Caching in wireless networks*
- *Experimental methods in Wireless Communications*

### Tutorials for PhD students and young researchers

- *Energy-efficient design of (5G and beyond 5G) wireless networks.*  
Alessio Zappone – Eduard A. Jorswieck
- *The Massive MIMO Paradigm – Fundamentals and State-of-the-Art* – Emil Björnson
- *Engineering wireless full-duplex nodes and networks* Melissa Duarte – Maxime Guillaud
- *On System-Level Analysis & Design of Cellular Networks: The Magic of Stochastic Geometry* - Marco Di Renzo

**Call for Contributions** – The TPC is soliciting contributions for oral presentations devoted to recent results in the area of B5G technologies in the form of an extended abstract, to be sent **BEFORE JUNE 15, 2016** at the e-mail address [luca.sanguinetti@unipi.it](mailto:luca.sanguinetti@unipi.it). We especially encourage students and junior researchers to participate. *There will be no published proceedings.* Any contribution of cutting edge research on (wireless) communication theory is welcome. The received contributions will be selected by the workshop TPC.

**Call for Special Sessions** – A few time slots are still open concerning the organization of special sessions on hot topics with invited presentations only. The proposal should be submitted by e-mail to [luca.sanguinetti@unipi.it](mailto:luca.sanguinetti@unipi.it) **BEFORE JUNE 01, 2016**, and should include a topical title, rationale, session outline, contact information, and list of invited speakers. The received proposals will be selected by the workshop TPC.