Call for Papers for Selected Areas in Communications Symposium

- Satellite and Space Communications (SSC) Track-

Scope

The recent advances of satellite communication technology have witnessed an unprecedented increase of services possibly distributed according to anywhere-anytime paradigm. To this regard, the appearance of new standards and the simultaneous integration with terrestrial infrastructure has introduced new technical challenges to be faced by the scientific community. In particular, the integration of satellite with 5G terrestrial network has further motivated the study of new networking and communication paradigms, taking also advantage of the renewed interest towards large constellation of LEO satellites.

The Satellite and Space Communications track solicits original and unpublished work not currently under review by any other conference or journal. The focus of this track is on exploring and discussing new technical breakthroughs and applications focusing on all aspects of satellite and space communications.

Topics of Interest

The Satellite Space Communications track solicits original contributions in, but not limited to, the following topical areas:

- Satellite and space communications and networking
- Near-Earth satellite communications
- Antennas for Satellite Communications
- MIMO satellite communications
- Coding, modulation and synchronization schemes for satellite communications
- · Channel models for satellite communications
- Security, privacy, and trust in satellite networks
- Radio resource management in satellite networks
- Cognitive satellite networks
- Integration of satellite and 5G networks
- QoS and performance for satellite networks
- On-board switching and processing technologies for next-generation satellite payloads
- Interference and Fade mitigation techniques over satellite channels
- Nano-satellites communications
- Mega-constellations design
- M2M over satellite applications
- New standard in navigation systems: Galileo, GPS, SBAS (EGNOS, WAAS...), GBAS.
- Signal detection and estimation for satellite communications
- Statistical and adaptive signal processing for satellite systems
- Satellite communications for maritime applications (e.g., VDE, AIS)
- Satellite-based disaster recovery
- Satellite-based solutions for aeronautical applications
- Delay Tolerant Networking for satellite networks
- Next-generation channel coding for deep-space communications
- Telemetry/telecommand space protocol evolutions

How to Submit a Paper:

The IEEE Globecom 2017 website (http://globecom2017.ieee-globecom.org/) provides full instructions on how to submit papers.

Important dates:

<u>Paper Submission</u>: 1 April 2017 <u>Paper Notification</u>: 25 July 2017

Camera-Ready Paper: 4 September 2017

Symposium Track - Chair:

Tomaso de Cola, German Aerospace Center (DLR), Germany, e-mail: Tomaso.decola@dlr.de

Tomaso de Cola received the Master degree (with honors) in telecommunication engineering, in 2001, the Qualification degree as Professional Engineer in 2002 and the Ph. D. degree in Electronic and Computer Engineering, Robotics and Telecommunications in 2010 from the University of Genoa, Italy. From 2002 until 2007, he worked with the Italian Consortium of Telecommunications (CNIT), University of Genoa Research Unit, as scientist researcher. Since 2008, he has been with the German Aerospace Center (DLR), where he has been involved in several projects funded by EU and ESA programs, focusing on different aspects of DVB standards, CCSDS protocols, emergency communications, and testbed design. He is taking part of different standardization activities within ETSI, IETF,



DVB, and CCSDS. He currently serves as deputy area director of the Space Internetworking Services (SIS) within CCSDS.

He is co-author of more than 70 papers, including international conferences and journals. His main research activity concerns: TCP/IP protocols, satellite networks, transport protocols for wireless links, interplanetary networks as well as delay tolerant networks, and communications strategies for emergency applications.

Dr. de Cola served on the Technical Program Committee at many IEEE International Conferences. He is member of the IEEE Communications Society and chair of the Satellite and Space Communications (SSC) technical Committee (TC) within ComSoc.