# **CTRQ 2017**

## Forward

The Tenth International Conference on Communication Theory, Reliability, and Quality of Service (CTRQ 2017), held between April 23-27, 2017 in Venice, Italy, continued a series of events focusing on the achievements on communication theory with respect to reliability and quality of service. The conference also brought onto the stage the most recent results in theory and practice on improving network and system reliability, as well as new mechanisms related to quality of service tuned to user profiles.

The processing and transmission speed and increasing memory capacity might be a satisfactory solution on the resources needed to deliver ubiquitous services, under guaranteed reliability and satisfying the desired quality of service. Successful deployment of communication mechanisms guarantees a decent network stability and offers a reasonable control on the quality of service expected by the end users. Recent advances on communication speed, hybrid wired/wireless, network resiliency, delay-tolerant networks and protocols, signal processing and so forth asked for revisiting some aspects of the fundamentals in communication theory. Mainly network and system reliability and quality of service are those that affect the maintenance procedures, on the one hand, and the user satisfaction on service delivery, on the other hand. Reliability assurance and guaranteed quality of services require particular mechanisms that deal with dynamics of system and network changes, as well as with changes in user profiles. The advent of content distribution, IPTV, video-on-demand and other similar services accelerate the demand for reliability and quality of service.

The conference had the following tracks:

- Quality and Reliability
- IONCOMM: Identity Oriented Networks-based Infrastructure and Communications
- Internet of Things Recent Trends, Technologies and Techniques
- Reliability and Maintenance

We take here the opportunity to warmly thank all the members of the CTRQ 2017 technical program committee, as well as all the reviewers. The creation of such a high quality conference program would not have been possible without their involvement. We also kindly thank all the authors that dedicated much of their time and effort to contribute to CTRQ 2017. We truly believe that, thanks to all these efforts, the final conference program consisted of top quality contributions.

We also gratefully thank the members of the CTRQ 2017 organizing committee for their help in handling the logistics and for their work that made this professional meeting a success.

We hope that CTRQ 2017 was a successful international forum for the exchange of ideas and results between academia and industry and to promote further progress in the area of communication theory, reliability and quality of service. We also hope that Venice, Italy provided a pleasant environment during the conference and everyone saved some time to enjoy the unique charm of the city.

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