IEEE Latvia Section

in association with Riga Technical University presents

Distinguished Visitors Program

with

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"Quantum Internet"

Very recently, researchers worldwide have started to devote massive efforts in designing and implementing quantum computation, with 50-qubit computing processors already built and 16-qubit processors available to researchers. Nevertheless, to fully unleash the ultimate vision of the quantum revolution, i.e., distributed quantum computing, it is necessary to design and to implement the Quantum Internet, able to connect distant remote quantum processors through quantum entanglement. Despite the tremendous progress of quantum technologies, long-distance efficient entanglement distribution still constitutes a key issue, and several key research issues must be addressed to design and eventually deploy quantum networks. Hence, this tutorial aims at providing the participants with a wide view about the unique challenges for designing quantum networks.

Anyone who is interested (students, teachers, professionals from industry, etc.) in the topic is invited to the lecture!
Marcello Caleffi (M’12, SM’16) received the M.S. degree (summa cum laude) in computer science engineering from the University of Lecce, Lecce, Italy, in 2005, and the Ph.D. degree in electronic and telecommunications engineering from the University of Naples Federico II, Naples, Italy, in 2009. Currently, he is with the DIETI Department, University of Naples Federico II, and with the National Laboratory of Multimedia Communications, National Inter-University Consortium for Telecommunications (CNIT).

From 2010 to 2011, he was with the Broadband Wireless Networking Laboratory at Georgia Institute of Technology, Atlanta, as visiting researcher. In 2011, he was also with the NaNoNetworking Center in Catalunya (N3Cat) at the Universitat Politecnica de Catalunya (UPC), Barcelona, as visiting researcher. Since July 2018, he held the Italian national habilitation as Full Professor in Telecommunications Engineering.

His work appeared in several premier IEEE Transactions and Journals, and he received multiple awards, including best strategy award, most downloaded article awards and most cited article awards. Currently, he serves as editor/associate editor for IEEE Communications Magazine, IEEE Communications Letters, IEEE Access and Elsevier Ad Hoc Networks. He has served as Chair, TPC Chair, Session Chair, and TPC Member for several premier IEEE conferences.

In 2016, he was elevated to IEEE Senior Member and, since 2017, he has been appointed as Distinguished Lecturer from the IEEE Computer Society and he serves as elected treasurer for IEEE ComSoc/VT Italy Chapter.