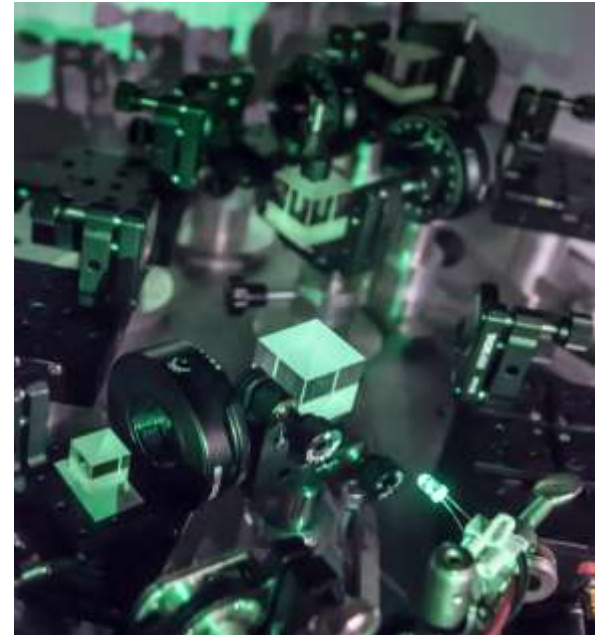


Q@TN Colloquium



Prof. Paolo Villoresi

QuantumFuture Research Group
Padua Quantum Technologies Research Center
Department of Information Engineering - University of Padua

Quantum Communications: from basic science to applications

November 6, 2025 – h 2:30 p.m.

Room A204 – Povo 1 – Via Sommarive n. 5

Abstract:

The exchange of quantum states is the most fundamental level of communications. This makes it possible to connect different systems but also to analyse the changes introduced by communication channels.

These possibilities are useful tools for the investigation of the basic principles of quantum mechanics.

Quantum communication is also a useful tool for countering cyber attacks, through the secure exchange of cryptographic keys and the generation of genuine random numbers.

The talk will present current aspects of ongoing research, in particular at the Res. Center for Quantum Technologies of the University of Padua and the QuantumFuture Research group.

Contacts:

Staff Dipartimento di Fisica
0461 28-1219-1504-1575-2042
dn_sst@unitn.it; info.qtn@unitn.it

Scientific Coordinators:

Prof. Roberto Iuppa - roberto.iuppa@unitn.it
Prof. Philipp Hans Juergen Hauke - philipp.hauke@unitn.it

with the financial support of