



QUANTUM COMPUTERS: HARDWARE, SOFTWARE AND APPLICATIONS

Dr. Enrico PRATI

**Scuola Superiore Sant'Anna | Pisa,
Istituto TeCIP, Grey Room 11:00 - 12:00
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Abstract:

Enrico Prati will analyze the current status of the science and technology of quantum computers. He will explain the difference between quantum computer architectures, programming resources and how they can be exploited. Prati will highlight open fields of research from silicon photonics to quantum compiling and quantum error correction codes.

Short Bio:

ENRICO PRATI (1974) is senior researcher of CNR-IFN in Milano. Its current research fields are both theoretical and experimental aspects low dimensional electron systems, quantum transport, applications of atomic scale nanoelectronics, microwave and THz effects in nanostructures. He was Plenary Keynote Speaker at IEDM 2014, TEDx Speaker in 2016, IOP Fall London Speaker in 2018. He is Professor of the Course "*Quantum Artificial Intelligence*" at the Doctoral School in Physics of Politecnico di Milano. He is author of 90 publications including Nature Nanotechnology, Nature Quantum Information and Nature COmmunication Physics. From November 2019 he is PI of the project granted by Italian Space Agency "QUASIX" on quantum devices for space QKD.