



University of Crete
Department of Physics

40 Years Anniversary Colloquium Series

Thursday, 10 October 2019 | 17:00 – 18:00, Seminar Room, 3rd floor

Quantum information technologies: quantum networks and near-term processors

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ABSTRACT

Lately the field of Quantum Information Science and related technologies have attracted vigorous world-wide interest and investments. These technologies include quantum computers that will be able to solve efficiently classes of important problems not accessible to classical computers, a new generation of sensors with improved sensitivity, and the ‘quantum internet’, an inherently secure network for communicating and accessing remote quantum computers securely. I will discuss the status of these technologies and showcase exciting advances. I will also present some highlights from my group, including our work on all-photon quantum networks and on quantum simulation of chemistry problems with near-term quantum processors.