University of Crete Quantum Technology Summer School



University of Crete, Department of Physics, 12-16 September 2022

Quantum science and technology has become a major pillar of modern scientific research, driven by massive investments of the public and the private sector. The field promises a new quantum era, where quantum information transmission and processing, as well as quantum sensing technologies, will bring about a profound transformation in our technological capabilities across a vast range of economic activities. Training the new quantum-agile workforce has become an urgent priority worldwide. This week-long summer school will feature Prof. Adesso (quantum information), Prof. Fabre (quantum optics), Prof. Kominis (quantum metrology & quantum biology), Prof. Makris (non-hermitian physics), Dr. Skotiniotis (quantum metrology), and Prof. Tsironis (nonlinear physics) and machine learning). Besides formal training on modern concepts of quantum optical states, quantum measurements, open quantum systems, quantum resource theories, quantum parameter estimation, quantum noise, and quantum AI, the school will include interactive problem solving sessions led by Dr. Gasbarri (open quantum systems & gravity), as well as mini research projects by the participants. Finally, the school will provide ample time for social interactions between lecturers and participants.

Senior undergraduate and graduate students (Masters, PhD) are welcome to apply.

Lecturers



Gerardo Adesso Professor of Mathematical Physics University of Nottingham

Venue



Claude Fabre Professor Emeritus Sorbonne Université



Giulio Gasbarri Postdoctoral Researcher Autonomous University of Barcelona



Iannis Kominis Associate Professor of Physics University of Crete



Kostas Makris Assistant Professor of Physics University of Crete



Michael Skotiniotis Senior Researcher Autonomous University of Barcelona



Giorgos Tsironis Professor of Physics University of Crete

Organization University of Crete - Institute of Theoretical and Computational Physics - Prof. lannis Kominis - ikominis@physics.uoc.gr Ms. Eleni Kandidaki - kandida@physics.uo Application

> 3rd Floor Seminar Room - Department of Physics - University of Crete - Heraklion 70013 - Greece 125 € (covers lunches and school dinner)









