The Physics Department of the University of Crete, together with the Institute of Theoretical and Computational Physics, are organizing a one-day workshop to discuss several hot topics driving the current surge of quantum science and technology. The presentations will be pedagogical and accessible by undergraduate and graduate students. The workshop will feature Professor Demetri Psaltis as honorary speaker, who will be conferred the title of Honorary Professor of the Physics Department of the University of Crete.

09:50 Welcome
10:00 Giorgos Tsironis
   Quantum machine learning
10:30 Spyridon Sotiriadis
   Non-equilibrium dynamics in quantum many-body systems
11:00 Iannis Kominis
   Quantum biology, the new frontier of quantum science
11:30 Coffee Break
12:15 Georgios Kontakis, UoC Rector
12:20 Alexandros Georgakilas, Physics Dept Chairman
12:25 Giorgos Tsironis
12:30 Demetri Psaltis
   Optics and machine learning
13:30 Reception
15:00 Liverios Lymerakis
   Implications of quantum mechanics at surfaces for the properties of modern optoelectronic devices
15:30 Xenophon Zotos
   Hot to cold tales
16:00 Konstantinos Makris
   Frontiers of photonics: optics in the complex plane
16:30 Discussion and Closure