



University of Crete
Department of Physics



FORTH
INSTITUTE OF ASTROPHYSICS



Joint Physics & IA/FORTH Colloquium

Thursday, 8 May 2025 | 17:00 – 18:00, Seminar Room, 3rd floor

Reaching a resolution of 10 microarcsec in the optical to resolve accretion disks

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ABSTRACT

The quantum properties of a gas of bosons were predicted by Einstein 100 years ago. The first experimental measurements of its consequences were performed by Hanbury-Brown & Twiss in 1954, when measuring the size of bright stars by correlating the arrival times of photons detected by two optical telescopes. Extremely large telescopes, 10ps resolution single photon detectors bring the key improvements to reach, in the optical, angular resolutions better than these achieved in the radio by the Event Horizon Telescope and to obtain the first images of accretion disks around galactic compact objects, active galactic nuclei and quasars.