

Fabrication and Characterization of Kinetic Inductance Detectors for mm and sub-mm Astrophysics

Abstract: *Lumped Element Kinetic Inductance Detectors (LEKIDs), are a very promising new type of superconducting photon detectors to be used in a wide variety of fields of physics, especially in Astronomy and Astrophysics. The talk will focus on the development of LEKIDs for mm and sub-mm space exploration. Both the experimental techniques applied in the nanofabrication of the detectors as well as their low temperature characterization will be discussed. Finally, the thermal and optical performance of the fabricated devices will be shown.*

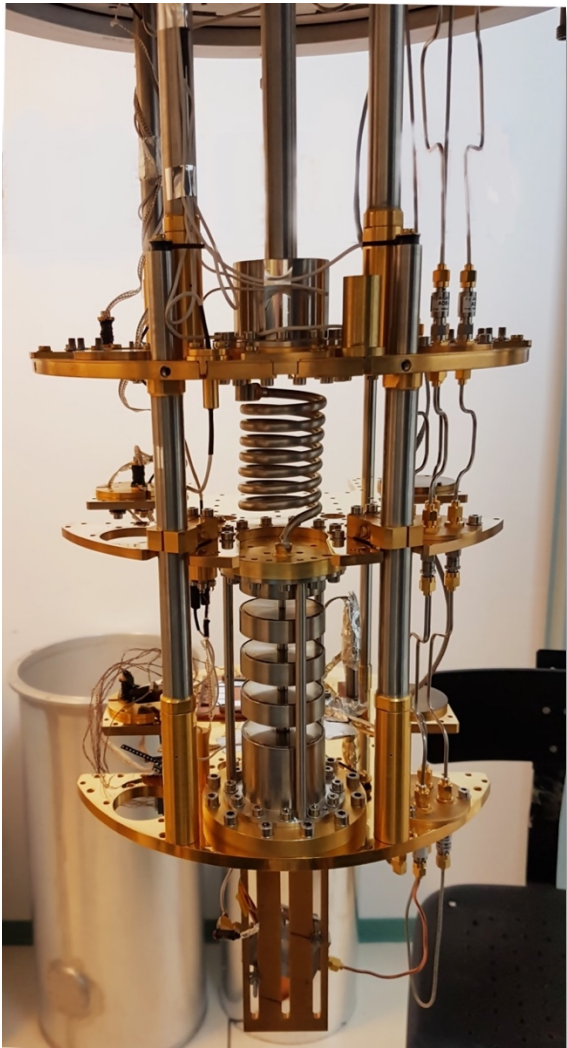


Figure 1 - Dilution Cryostat used for the characterization.

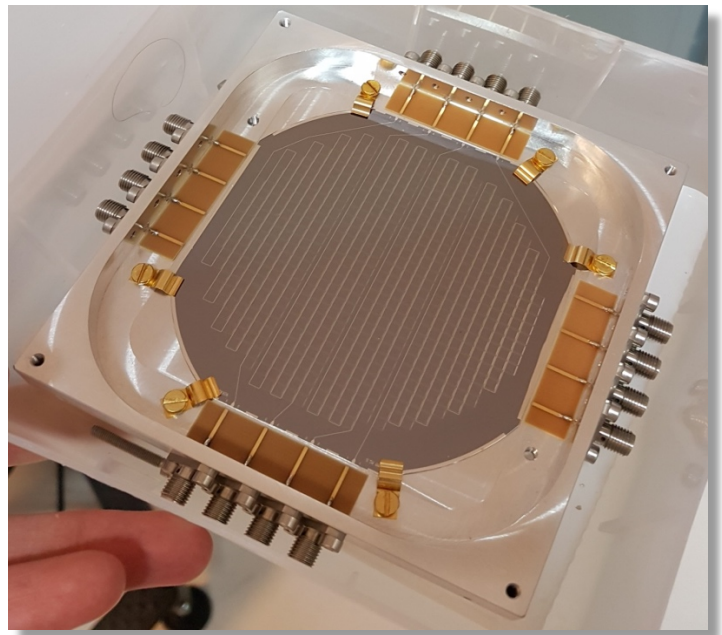


Figure 2 - Example of a fabricated device.