

Contribution ID: 27

Type: **Oral Contribution**

LEKID for space applications

Wednesday, 22 June 2016 14:00 (25 minutes)

Kinetic Inductance Detectors (KID) are now routinely used in ground-based telescopes. Large arrays, deployed in formats up to kilopixels, exhibit state-of-the-art performance at millimeter (e.g. 120-300 GHz, NIKA and NIKA2 on the IRAM 30-meters) and sub-millimeter (e.g. 350-850 GHz AMKID on APEX) wavelengths. In view of future utilizations above the atmosphere, we have studied in detail the interaction of ionizing particles with LEKID (Lumped Element KID) arrays. We have constructed a dedicated cryogenic setup that allows to reproduce the typical observing conditions of a space-borne observatory. We will report the details and conclusions from a number of measurements. We give a brief description of our short term project, consisting in flying LEKID on a stratospheric balloon named B-SIDE.

Primary author: Dr MONFARDINI, Alessandro (CNRS Grenoble)

Presenter: Dr MONFARDINI, Alessandro (CNRS Grenoble)

Session Classification: Session 1: MKIDs for optical, infrared, and millimeter wave telescopes - Part 2

Track Classification: MKIDs for optical, infrared, and millimeter wave telescopes