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Readout of the BLAST-TNG MKID detectors

Thursday, 23 June 2016 14:50 (25 minutes)

I will describe the status of the readout software and electronics for the BLAST-TNG linear polarization sensitive MKIDs arrays. The Balloon-borne Large Aperture Submillimeter Telescope (The Next Generation) will fly more than 3000 pixels combined with a 2.5m carbon fiber primary mirror to make diffraction limited observation at 250, 350 and 500 microns. It will map mearby molecular clouds and the diffuse galactic dust polarized emission with unprecedented detail. The 250 micron array has been integrated in the new cryostat and it is under test to establish the optical and polarization
characteristics of the instrument. BLAST-TNG will demostrate the effectiveness of kilo-pixel MKID arrays for applications in submillimeter astronomy. It will fly from Antarctica in December 2017 for 28 days and it will be the first balloon borne telescope to offer a quarter of the flight for “shared risk” observing for the community.

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