Poster

MKID Snapshots

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We have developed a technique to take snapshots of arrays of Microwave Kinetic Inductance Detectors (MKIDs). By reimaging the MKID chip onto an image plane outside a cryostat and scanning with an optical or infrared source in this plane we can detect the resonator response using a conventional microwave readout technique. From the position of the source and the detector response we can determine the array pixel pattern allowing comparison with the design. This technique allows us to study the pixel cross talk and compare with models on bare resonators. Using higher magnification reimaging optics we can resolve individual MKID resonator in details and image its readout current distribution.