LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS (LEPP)

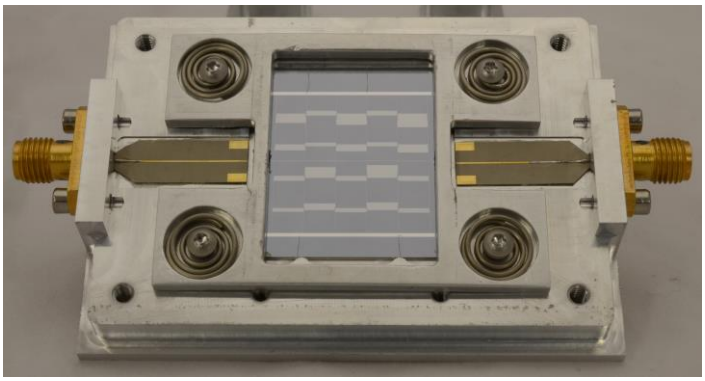
Journal Club

Brad Johnson

Columbia

Kinetic Inductance Detectors for CMB Studies

I will discuss recent results from our kinetic inductance detector development projects. Kinetic inductance detectors are superconducting thin-film, GHz resonators that are designed to also be optimal photon absorbers. This detector technology is particularly well-suited for the sub-kelvin, kilo-pixel detector arrays needed for CMB studies because each detector element can be dimensioned to have a unique resonant frequency, and the probe tones for hundreds to thousands of detectors can be carried into and out of the cryostat on a single pair of coaxial cables.



Friday

Feb. 26, 2016

4:00pm

301 Physical Sciences Bldg.