

Contribution ID: 31 Type: Poster

Constraining the primordial gravitational-wave using BICEP/Keck Array data up to 2018

Thursday, 25 July 2019 18:45 (15 minutes)

The BICEP and Keck experiments, located at the South Pole, are currently observing the polarized microwave sky over wide range of frequencies at the degree scale to search for the primordial B-modes within the Cosmic Microwave Background. The newest preliminary result shows our Q/U maps reach depths of 2.5, 2.9 and 5.8 μK_{CMB} arcmin at 95, 150 and 220 GHz respectively over an effective area of 400 to 600 square degrees with the Keck Array and BICEP3 telescope. Additionally, our 270 GHz polarization data from 2018 now achieved a signal-to-noise on polarized dust emission approximately equal to Planck data. In this talk, I will give an update on the current analysis effort, with preliminary maps and internal consistency measurements using data taken from 2010 to 2018.

Less than 5 years of experience since completion of Ph.D

Y

Student (Ph.D., M.Sc. or B.Sc.)

N

Primary authors: HUI, Howard (Caltech); BICEP/KECK COLLABORATIONS

Presenter: HUI, Howard (Caltech)

Session Classification: Poster session

Track Classification: Low Temperature Detector Applications