

Astrophysics Seminar Monday, March 2, 2015

Detection of B-mode Polarization at Degree Angular Scales using BICEP2

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Abstract:

BICEP2, a CMB polarization experiment that operated at the South Pole from 2010--2012, reported a detection of B-mode polarization at degree angular scales in March of last year. While this result was initially interpreted as evidence for primordial gravitational waves from inflation, new data from the Planck satellite has shown that polarized emission from Galactic dust is brighter than what was assumed. I will report on the just-released joint analysis of data from BICEP2, the Keck Array (successor to BICEP2 at the South Pole), and Planck. I will also discuss the prospects for improving this measurement in the near future with data at 100 and 220 GHz from Keck Array and BICEP3.

3:15 pm

Refreshments
CAS Room 500

3:30 pm

Seminar
CAS Room 502

Next Week

- *Stella Offner*
UMass
- The Origin and Universality
of the Initial Mass Function

