Impressions from a CMB Experimentalist

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KIPAC Special Colloquium: 'Swirls from the Big Bang'

Wednesday, March 19 from 3:00-5:30pm PDT

Live video stream starting at 2:55pm PDT
I’m sorry.
BICEP2 is truly cutting-edge

- Camera
- Optics
- Calibration
- Analysis
This is very impressive.
This is very reassuring.
I’m not very worried about this.

- **BICEP2**  
  after foreground BB removed

- **Planck+WP**  
  LCDM+r  
  *no running*
Looking forward

**have data:**  Keck, Planck, SPTpol
ABS, ACTpol, EBEX, Polarbear

**coming soon:**  BICEP3, SPIDER
CLASS, Polarbear-2, SPT-3G, PIPER

different *frequencies*, 40 GHz-220 GHz
different *angular scales*, $L \sim 3$ to 3000
different *systematics*
different *analysis techniques*
“The long search for tensor $B$-modes is apparently over, and a new era of $B$-mode cosmology has begun.”

- last sentence of BICEP2 discovery paper