

BICEP2 Results, Implications, and Future

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The BICEP2 team has just announced the detection of degree-scale B-mode polarization of the CMB, consistent with the imprint of inflationary gravitational waves. $r=0$ model is ruled out at very high significance. BICEP2 is the second generation in the BICEP/Keck series of small refractor experiments. I will discuss the immediate prospect of confirming and expanding BICEP2's discovery by Keck Array and BICEP3. A dedicated program that covers more sky can significantly reduce the uncertainties on tensor amplitude, putting models of inflation to further test.