

Systematics control and mitigation for BICEP/Keck deep polarization maps

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Small-aperture ground-based telescopes are a well-demonstrated method for achieving high sensitivity to degree-scale CMB polarization. Current and future experiments including BICEP Array, Simons Observatory, and CMB-S4 will all use similar designs in their effort to detect primordial gravitational waves. I will review the experience gained from the long-running BICEP/Keck program at the South Pole, focusing on design decisions and analysis techniques that mitigate instrumental systematics and enable the tightest constraints to date on B-mode polarization at degree scales.

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