

Measurements of the CMB polarization

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The cosmic microwave background (CMB) is revolutionizing our understanding of the Universe. The CMB is the strongest single piece of evidence that we live in a geometrically flat Universe, dominated by non-baryonic cold dark matter and dark energy. Many outstanding questions remain around this basic framework: Did inflation occur, and what physics was responsible for it? What is dark energy? What are the neutrino masses? Are there new particle species that we can detect cosmologically? Remarkably the CMB can shed light on all of these questions. I will give an overview of the state of CMB polarization experiments, and then focus on the latest results from two specific CMB polarization experiments: SPTpol and PolarBear. I will also discuss the forecasts for upcoming experiments.

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