

Abstract Submitted  
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**The Cosmic Microwave Background Radiation and its Polarization** EDWARD WOLLACK<sup>1</sup>, NASA Goddard Space Flight Center — The cosmic microwave background (CMB) radiation and its faint polarization have provided a unique means to constrain the physical state of the early Universe. Continued advances in instrumentation, observation, and analysis have revealed polarized radiation signatures associated with gravitational lensing and have heightened the prospects for using precision polarimetry to experimentally confront the inflationary paradigm. Characterization of this relic radiation field has the power to constrain or reveal the detailed properties of astroparticle species and long wave gravitational radiation. On going and planned CMB polarization efforts from the ground, balloon, and space borne platforms will be briefly surveyed. Recent community activities by the Inflation Probe Science Interest Group (IPSIG) will also be summarized.

<sup>1</sup>NASA PCOS mini-symposium (invited IPSIG talk)

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