

Abstract Submitted
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Atacama Cosmology Telescope: Polarization calibration analysis for CMB measurements with ACTPol and Advanced ACTPol BRIAN KOOPMAN, Cornell University, ACTPOL COLLABORATION — The Atacama Cosmology Telescope Polarimeter (ACTPol) is a polarization sensitive upgrade for the Atacama Cosmology Telescope, located at an elevation of 5190 m on Cerro Toco in Chile. Achieving first light in 2013, ACTPol is entering its third observation season. Advanced ACTPol is a next generation upgrade for ACTPol, with additional frequencies, polarization modulation, and new detector arrays, that will begin in 2016. I will first present an overview of the two projects and then focus on describing the methods used for polarization angle calibration of the ACTPol detectors. These methods utilize polarization ray tracing in the optical design software CODEV together with detector positions determined from planet observations and represent a critical input for mapping the polarization of the CMB.

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