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ACTPol: Overview of a next-generation polarization-sensitive CMB observatory in Chile JEFF MCMAHON, University of Michigan, ACT-POL COLLABORATION — ACTPol is a new polarization sensitive receiver on the six-meter Atacama Cosmology Telescope which is surveying the Chilean sky and will produce deep maps of the polarization, temperature, and lensing of the Cosmic Microwave Background (CMB) in two frequency bands centered near 90 and 150 GHz. These measurements will improve constraints on inflation, neutrino properties, curvature, the primordial helium abundance, and dark energy. Cross correlating the ACTPol maps with optical surveys accessible from Chile will significantly amplify these constraints. In this talk I provide an overview of the project inclduing discussions of the instrument, science goals, and status of ACTPol.

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