

Abstract Submitted  
for the APR13 Meeting of  
The American Physical Society

**First CMB Polarization Measurements from SPTpol** STEPHEN HOOVER, University of Chicago, SPTPOL COLLABORATION — The South Pole Telescope (SPT) is a 10-meter mm-wave telescope located at the geographic South Pole, and dedicated to measurements of the cosmic microwave background (CMB). We installed a new, polarization-sensitive receiver (SPTpol) in January 2012, and spent the 2012 Austral winter observing the 100 square degree SPT deep field. SPTpol is among the first of a new generation of CMB experiments capable of detecting the  $\sim 100$  nK fluctuations of the CMB's B-mode polarization. It has 1536 polarization-sensitive detectors split between 150 GHz and 90 GHz observing bands, and can measure arcminute-scale features on the CMB sky. Here I present early results from the SPTpol E-mode and B-mode CMB polarization measurements.

Stephen Hoover  
University of Chicago

Date submitted: 10 Jan 2013

Electronic form version 1.4