Abstract Submitted for the APR18 Meeting of The American Physical Society

Camera Development for a Next-Generation TeV Gamma-Ray Telescope¹ COLIN ADAMS, RACHEL FEDORA, BRENDAN KRULL, THOMAS MEURES, LESLIE TAYLOR, JUSTIN VANDENBROUCKE, MEGAN WACH-TENDONK, Univ of Wisconsin, Madison, CTA COLLABORATION — The Cherenkov Telescope Array (CTA) is a next-generation ground-based observatory to study very-high-energy gamma rays. US and international collaborators are developing a novel two-mirror telescope, denoted the prototype Schwarzschild-Couder Telescope (pSCT). The pSCT will provide a wider field of view, better angular resolution, and better background rejection than conventional single-mirror telescopes. In addition to its dual-mirror optics, the pSCT features a high-resolution, compact camera based on silicon photomultipliers and waveform-sampling application specific integrated circuits. Scheduled for commissioning in 2018, the pSCT will function alongside the VERITAS array in Arizona. This presentation describes the current status of camera integration, testing, and calibration, and discusses the outlook for on-site camera operation.

¹National Science Foundation

Colin Adams Univ of Wisconsin, Madison

Date submitted: 12 Jan 2018 Electronic form version 1.4