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Spectroscopic Characterization of White Dwarf Candidates for Calibrating the Dark Energy Survey MEES FIX, ALLYN SMITH, Austin Peay State Univ, DOUGLAS TUCKER, WILLIAM WESTER, Fermi National Accelerator Lab, AUSTIN PEAY STATE UNIVERSITY COLLABORATION, FERMI NATIONAL ACCELERATOR LAB COLLABORATION — The Dark Energy Survey (DES) is a current project in Fermilab's Cosmic Frontier. The DES is a 5000-square-degree optical/near infrared imaging survey conducted over 5 years (2013-2018) for purposes of quantifying the properties of dark energy. Synthetic photometry of pure-hydrogen-atmosphere ("DA") white dwarfs is currently the preferred technique for determining the absolute zeropoint calibration of large sky surveys. For absolute calibration of the DES we seek to develop a "Golden Sample" of 30-100 DA white dwarfs. The starting point is a photometric and spectroscopic observational campaign of $\approx$ 1000 candidate white dwarfs in the DES footprint. Analysing imaging and spectroscopic data will allow us to narrow down this sample. We present results of the analysis of the observing effort. Over 50% of the observed candidates are to date DA white dwarfs. This portion of the the project was performed as part of the Department of Energy Visiting Faculty Program conducted at the Fermi National Accelerator Laboratory.

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