

WHITE DWARFS IN THE HETDEX SURVEY

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In this presentation, I will show the first results of our survey of white dwarfs that were discovered in the Hobby-Eberly Telescope Dark Energy Experiment (HETDEX). Observations were done using the VIRUS Integral-field Units (IFU) array, covering between 3500Å and 5600Å, with resolution $R \approx 2$. As a by-product of the first data release of the dark energy survey, we have obtained high signal-to-noise spectrum of ~ 100 white dwarfs down to a magnitude of 21, in the g-band. We cross-matched with Gaia and Sloan Digital Sky Survey (SDSS) data to reliably fit the spectra for effective temperature and surface gravity. The primary science goal of our project is to produce a unique magnitude-limited catalog of as many as 10,000 spectroscopically confirmed white dwarfs. Given we are using IFU data, our survey is free of the selection biases that plagued the SDSS. Our final survey will produce a WD luminosity function five magnitudes fainter than the one derived from the Palomar-Green survey (PG) and with a similar number of faint stars as the one from SDSS.