Abstract Submitted for the TSF09 Meeting of The American Physical Society

Student Observation Driven Astronomy at Trinity¹ GARETH JONES, DAVID HOUGH, Trinity University — Trinity University is part of a consortium of institutions in the Associated Colleges of the South that is developing new Student Observation Driven Astronomy (SODA) labs. The emphasis in these labs is on using data obtained by the students themselves to investigate astrophysical problems. We have focused our effort on three new labs: measurements of lunar features, transiting exoplanets, and stellar spectra. The lunar lab, while fairly conventional, is comprehensive in terms of visual observing procedures and analyses to measure feature characteristics. The exoplanet lab combines CCD transit observations and information from the literature to determine several exoplanet properties. The stellar spectra lab uses CCD spectra with absolute wavelength calibration and normalized flux calibration based on a standard star, and covers the full range of spectral classes. With each lab write-up, we include our own data obtained with Trinity's teaching observatory as examples and for potential use in indoor labs.

 $^1\mathrm{We}$ thank the Mellon Foundation and Trinity for financial support.

David Hough Trinity University

Date submitted: 25 Sep 2009

Electronic form version 1.4