

Abstract Submitted  
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**Detecting the Exoplanet Transits of HD 209458 and TrES-1**

TRACEY WELLINGTON, DR. TOM MICHALIK, Advisor, Randolph-Macon Woman's College, Lynchburg, VA — There has been great interest in recent years in exoplanets and the stars which they orbit. Exoplanets are planets which orbit stars other than the Sun. Since the first exoplanet discovery in 1995, professional and amateur astronomers alike have been searching for planetary systems outside our solar system in hopes of someday finding one similar to Earth. We observed the transit of two planets, HD 209458b and TrES-1b, across their stars. These transits were detected using a CCD camera in order to obtain a light curve, a graph of the star's magnitude versus time, for the transit. Extensive use of the telescope and CCD camera located at the Winfree Observatory at Randolph-Macon Woman's College, along with camera software and image processing software, was essential to obtaining the light curves. The resulting light curves were compared to those of other observers in order to confirm the accuracy of our results.

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