

Abstract Submitted
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Deriving Telescope Properties Using Daytime Sky Observations¹

SHANNON HALL, Whitman College, DAVID HARRINGTON, University of Hawaii — High-resolution spectropolarimetry in night-time astronomy is a relatively new but powerful remote sensing technique. In order to make accurate spectropolarimetric measurements using large telescopes it is necessary to derive the calibration of the telescope by recovering the Mueller matrix elements. These calibrations are typically difficult to recover and are functions of wavelength and telescope pointing. We demonstrate a novel technique using observations of the bright, highly polarized, and easily accessible daytime sky. With the calibration of the AEOS 3.67m telescope on Haleakala and the new low-resolution spectropolarimeter LoVIS we illustrate the spectropolarimetric accuracy with observations of AB Aurigae.

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