Spectroscopic Study of Variable Hydrogen Line Emission in Be Stars

ELIJAH LUPARDUS, CRAIG HOWALD, ANN BRAGG, Marietta College

— This senior project uses a spectrometer built by previous Marietta College seniors to study Be stars, which are characterized by variable emission in their hydrogen lines. The spectrometer is attached to a 16 inch reflecting telescope and raw images are obtained using the Artemis CAPTURE program. A Python program was created to translate these images into spectra and to quantify the amount of emission or absorption in the hydrogen lines. We will present spectra of omicron Cassiopeia, V442 Andromeda, HD6343, and an analysis of the changing spectral lines in gamma Cassiopeia.