

THE SPECTRAL ANALYSIS OF CW Cep FOR SURROUNDING STRUCTURE

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In this study, the variation of the equivalent widths (EW) and the full width at half maximum (FWHM) of the H α and He I (6678,15) lines of CW Cep, which is an early-type, double-lined, eclipsing binary (B0.5V-B0.5V), are examined.

We obtained the reduced spectra from <http://basebe.obspm.fr/basebe/>. The EW and FWHM values of the H α and He I (6678,15) lines were determined using the SPLAT spectral analysis program.

The source of the H α line is the disk surrounding the CW Cep. That is why the emission line is observed. He I (6678,15) is the absorption lines on the surface of the stars.

The EW of the H α line shows an irregular variation around the zero phase but does not show a large change in the rest of the phase, while the FWHM value reaches maximum values during the eclipsing. The EW of the He I (6678,15) lines reaches maximum values during eclipsing and also shows small variations in FWHM values.