D266: THE BINARY BLUE STRAGGLER IN NGC 2354

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We present spectroscopic observations of the recently discovered eclipsing binary blue straggler in the open cluster NGC 2354. A radial velocity curve of the brightest component of star D266 is obtained by means of 30 echelle spectrograms. The last versions of the Wilson-Devinney code were employed for the analysis of the older UBV light curves and the new velocity curve. The fundamental parameters of the system are determined including the rotational velocity \( v \sin i \). It is shown that the present properties of star D266 are compatible with a binary star formed at the same time as the other cluster members and evolved with mass transfer while the secondary component was near the turn-off point. Our data provides a determination of the binary mean velocity which agrees well with previous values obtained for several red giants members of NGC 2354.

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THE UV SPECTRUM OF THE CP HGMN STARS \( \mu \) LEPORIS AND 53 TAURI

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We have determined the abundances of the “iron peak” elements of two classical members of the HgMn group of the CP stars, \( \mu \) Leporis and 53 Tauri, using IUE archive images provided by VILSPA. We have normalized each order of the IUE spectra to the continuum by using the interactive code NORMA.

Because the effective temperatures of these stars are higher than 10 000 K, the HgMn stars emit a large part of their flux below 3000 Å; moreover, the UV region of the spectrum is rich in strong absorption lines and offers the opportunity to analyze the behavior of elements whose lines in the optical region are too weak to allow accurate abundance determination.

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CHEMICAL ABUNDANCE STUDY OF THE CP STAR HD 133029

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We present an analysis of the magnetic CP star HD 133029, to study its elemental abundances for comparison with those theories which purport to explain their elemental abundances, such as the various radiative diffusion scenarios of Michaud and his collaborators. Four nitrogen-baked IIa-O 4.3 Å/mm spectrograms obtained at Mount Wilson Observatory were used in this study.

To determine the atmospheric parameters, \( T_{\text{eff}} \) and \( \log g \), we used a comparison of:

i) the \( uby\beta \) colors observed with the calibration of Napiwotzki et al.

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