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ON THE PRIMARY MASS OF NSV 12615 *

The cataclysmic variable NSV 12615 shows eclipses repeating with a period of 0.06142 d (Jablonski and Steiner, 1987). In a recent paper Mukai et al. (1988) presented spectroscopic observations around H α and reported on discrepancies in estimating the primary mass. As these authors suggest, one possibility to abolish this problem would be to enhance the semi-amplitude of the orbital velocity from 56 km/s to \approx 100 km/s corresponding to a primary mass of \approx 0.2 M $_{\odot}$.

About three months after their observations a spectrum of that object was obtained using the ESO 3.6m telescope equipped with the Boller & Chivens spectrograph and CCD. Besides H α the HeI line λ 5876 is present in the recorded wavelength region (Fig. 1). Spectral resolution and integration time were nearly identical with their spectroscopy (binned data) and similar values for the FWZI of H α and the separation of the components can be derived. Given their epoch of the inferior conjunction of the secondary and the known period the corresponding phase for that spectrum is 0.8 ± 0.3 , i.e. near the maximum of the radial velocity curve. A Gauss fit to the line wings of H α yields a (heliocentric) velocity of $\approx 60 \pm 10$ km/s. This either would correspond to a higher semi-amplitude of ≈ 120 km/s or to a shift of the γ -velocity by ≈ 60 km/s. The higher semi-amplitude would still (or even better) be in accordance with their diagnostic diagram and would thus favour a low primary mass.

* based on observations collected at the European Southern Observatory La Silla / Chile

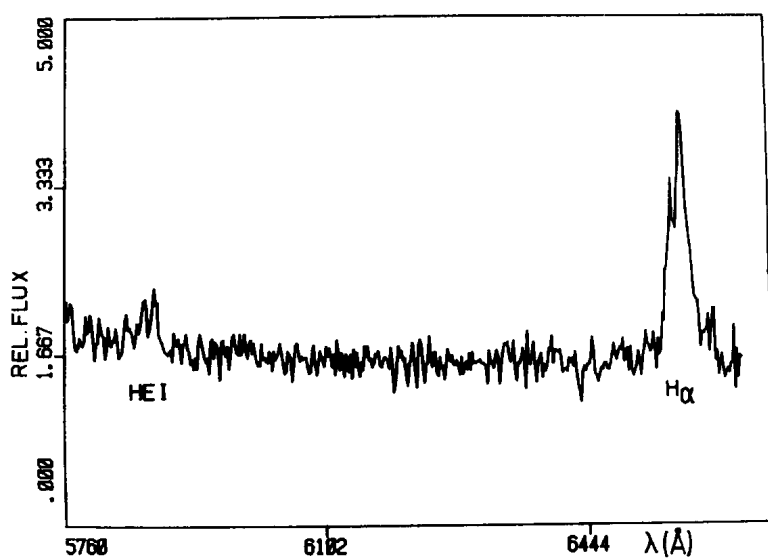


Figure 1 Spectrum of NSV 12615

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