

**THE IDENTIFICATION AND UBV PHOTOMETRY
OF THE VISIBLE COMPONENT
OF THE CENTAURUS X-3 BINARY SYSTEM**

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Abstract. The optical component of the pulsating binary X-ray source Cen X-3 is identified with a faint, $\langle V \rangle = 13.35$, heavily reddened variable star lying slightly outside the 3rd Uhuru Catalogue error box. It shows a double peaked light curve with an amplitude of about 0.12 mag, which agrees both in period and phase with the X-ray data. The shallower minimum coincides in time with the X-ray pulsar eclipse. Interpretation of the light curve leads to the conclusion that the contribution from gravity darkening dominates to a large extent the reflection effect. The estimated distance to Cen X-3 is about 8 kpc.

(This paper has been published in *Astrophys. J.* **192** (1974), L135.