

BH Cas IS AN ECLIPSING BINARY

The variability of BH Cas was discovered by Beljawsky (1931) and confirmed by Kukarkin (1938) who classified it as possibly W UMa-type with period ~ 0.5 days. Ahnert and Hoffmeister (1943) found no star in the region of BH Cas with the proposed variation. Metcalfe (1994) published observations supporting the variability of BH Cas.

In Figure 1, observations of BH Cas obtained in the V-band on the nights of 8 October 1994 (squares) and 19 February 1994 (triangles) are shown. The comparison star was GSC 03665 00784 with a measured apparent visual magnitude of 13.61 ± 0.02 .

The light curve confirms that BH Cas is an eclipsing binary of W UMa-type, counter to the conclusion of Ahnert and Hoffmeister. The period is $P \sim 0.39$ days, and the HJD epochs of primary and secondary minimum are $T_1 = 2449767.6661$ and $T_2 = 2449634.7378$ respectively. Observations in the B- and R- bands indicate that $(B-V) \approx 0.6$ and $(V-R) \approx 0.3$.

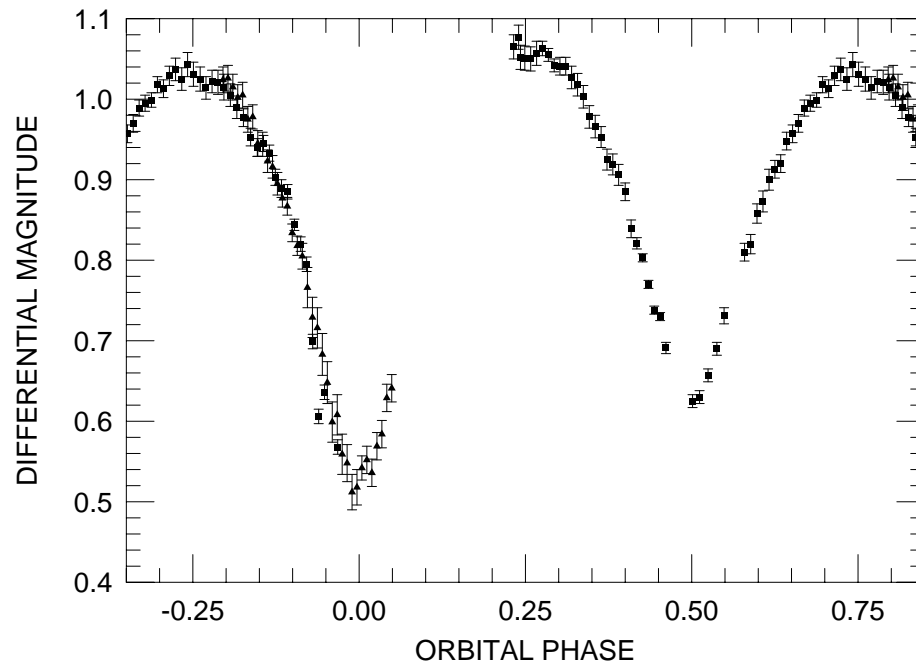


Figure 1

Future efforts at Steward Observatory will be concentrated on improving the V-band light curve and determining a more precise period. Collaboration is especially needed for reconstruction of the B- and R-band light curves. Observers at greatly different longitudes than Steward ($L_w \simeq 7^{\text{h}} 23^{\text{m}}8$) would be most welcome. For finder charts or additional information, please contact the undersigned.

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References:

- Ahnert, P. and Hoffmeister, C., 1943, *KVBB*, **28**, 4
Beljawsky, S., 1931, *AN*, **243**, 115
Kukarkin, B.W., 1938, *NNVS*, **5**, 195
Metcalf, T.S., 1994, *IBVS*, No. 4038