

## BZ CAMELOPARDALIS = 0623+71 : THE CATAclySMIC VARIABLE INSIDE A BOW-SHOCK NEBULA

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The object BZ Cam = 0623+71 (Krautter et al., 1987) was observed at the telescope AZT-11 of the Crimean Astrophysical Observatory by using the UBVRi photometer-polarimeter of the Helsinki University (Korhonen et al., 1984). No significant linear polarization was found, the mean values have the upper limit of 0.2 per cent.

The brightness variations in all five bands are highly correlated, with the amplitude increasing to the shorter wavelengths, and reaching 0.4 mag in U. The significant peaks at the periodogram occurred at the frequencies 12.8-17.6, 39.3-42.2, 66-70 (2-hour set at 12.12.91) and 10.2-10.7 (4-hour set at 23.02.92) cycles/day, far from the values 7.2 or 6.5 cycles/day, corresponding to the possible spectral periods suspected by Lu and Hutchings (1985). Such apparent variations of the 'periods' from night to night are similar to that observed in other cataclysmic variables, eg. MV Lyr.

For the high frequencies, we determined the parameter  $\gamma$  for the power approximation of the periodogram :  $S(f) \propto f^{-\gamma}$  (cf. Terebizh et al., 1989). Its value was found to be  $\gamma = 1.08 \pm .05$  in U and  $0.86 \pm 0.04$  in R, practically equal to unity. The values  $\gamma = 0$  and  $\gamma = 1$  were found for the inactive and active states of the magnetic binary AM Her (Shakhovskoy et al., 1992), and  $\gamma = 2$  for the cataclysmic variable HQ And (Andronov et al., 1992). This parameter may give the additional information on the nature of the variability.

### References

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