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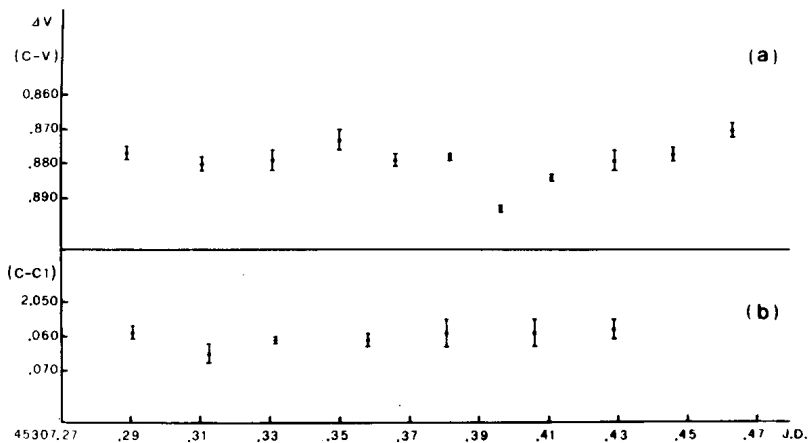
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HD 7119: A PROBABLE NEW PULSATING DELTA DELPHINI STAR

The mutual exclusion between pulsation and metallicity for A and F main sequence stars seems to be well established. For the giant domain (class IV and III) the scenario is more complex: the relation between metallicity and pulsation is depending on the temperature, in the sense that the evolved Am stars, in the blue side, do not show any photometric variability (Garrido, 1980), while in the red side Kurtz (1979) finds a few variable Delta Delphini stars.

With the aim to throw light on this subject, we decided to perform an extensive photometric survey of Delta Del stars. The plan is to observe for at least two nights a sufficient number of objects included in the list of the sure Delta Del stars, kindly furnished by M. Jaschek, and to infer some statistical correlations as metallicity-pulsation, rotation-pulsation and so on.

In the framework of this research we found the probable variability of HD 7119.



We observed HD 7119, classified as Delta Del star by Cowley et al. (1965) and confirmed by M. Jaschek (1982), during JD 45307, in V color. (For instrumental equipment and the reduction procedure, see Bossi et al. 1970). Comparison and check stars were HD 7615 and HD 7745 A.

Figure 1a,b shows the comparison minus variable (c-v) and the comparison minus check (c-cl) light curves, respectively. Each point is the mean of about six individual observations and the bars represent two standard errors.

The understanding of the pulsational characteristics of HD 7119 requests much more study.

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References:

- Bossi, M., Guerrero, G. and Mantegazza, L.: *Astron. Astrophys. Suppl.* 29, 327, 1970  
Cowley, A.P. and Cowley, C.R.: *PASP* 77, 184, 1965  
Garrido, R., Lopez de Coca, P., Quintana, J.M., Rolland, A. and Saez, M.: *Astron. Astrophys.* 83, 114, 1980  
Kurtz, D.W.: *MNRAS* 189, 1, 1979  
Jaschek, M.: private communication, 1982