

COMMISSION 27 OF THE I. A. U.
INFORMATION BULLETIN ON VARIABLE STARS
NUMBER 388

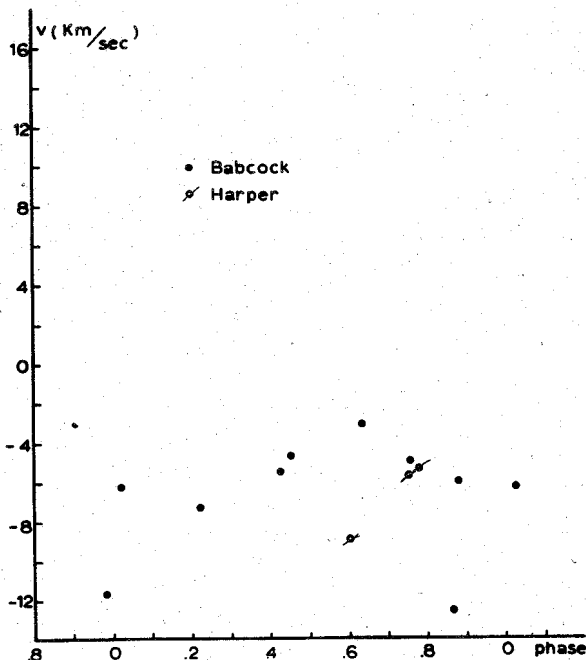
Konkoly Observatory
Budapest
1969 October 10

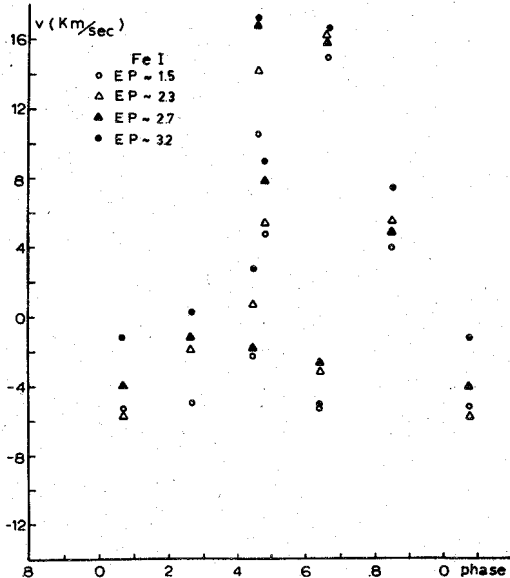
THE MAGNETIC STAR 53 CAMELOPARDALIS

The study of high dispersion spectra (9.7 Å/mm) of the spectrum variable A2p star 53 Cam is in progress. The magnetic variations have been studied by Babcock (1) and Preston (2).

The photoelectric variations have been investigated by Jarzebowski (3), Rakos (4) and Preston - Stepien (5): phase relation between the light and magnetic variations depends on wavelength.

The radial velocity measures do not follow a regular curve and are shown in figure 1 and 2. (The elements are





those of Preston and Stepien (5)). Present velocities show more positive values than those of Babcock (6) and Harper (7). As for HD 125248 (8) these observations can be explained with an orbital motion about an unseen companion but more observations both photoelectric and spectrographic are needed. A similar conclusion is suggested by observations in progress by Preston (private communication by A.I. Deutsch).

Stratification effects are present as shown in Figure 2. The line intensities and widths are variable. The variations of Ti II are out of phase with those of Mg I and II, Eu II and the K line of Ca II.

ROSANNA FARAGGIANA
Astronomical Observatory
Trieste

References

- 1) Babcock H.W. Stellar magnetic fields in stars and stellar systems 6, 228, 1960
- 2) Preston G.W. Ap.J. 157, 247, 1969
- 3) Jarzebowski T. Acta astronomica 10, 237, 1960
- 4) Rakos K.D. Lowell Obs. Bull. 5, 227, 1962
- 5) Preston G.W. and Stepien K. Ap.J. 151, 583, 1968
- 6) Babcock H.W. Ap.J. Suppl. III, 141, 1958
- 7) Harper W.E. Dom. Astroph. Obs. Victoria 7, 1, 1937
- 8) Babcock H.W. Ap.J. 114, 1, 1951