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STAR ON POSITION OF PKS 1925-524 VARIABLE

The radio source PKS 1925-524 ($\alpha_{1950} 19^h 25^m 46^s$, $\delta_{1950} -52^\circ 26' 19''$) was identified by Wall and Cannon (1973) with "a bright star ($V \approx 12^m$) on position". Since no finding chart was published, an identification was made using ESO Sky Survey print 232 of the B series and the accompanying overlay grids. Table 1 gives V magnitudes and colours for comparison stars in the finding chart (Fig. 1).

Table 1 COMPARISON STARS

Star	V	B-V	U-B
1	10.144	.643	.198
2	10.596	1.087	.914
3	11.833	.604	.041
5	11.695	.446	.049
8	11.262	.408	-.045



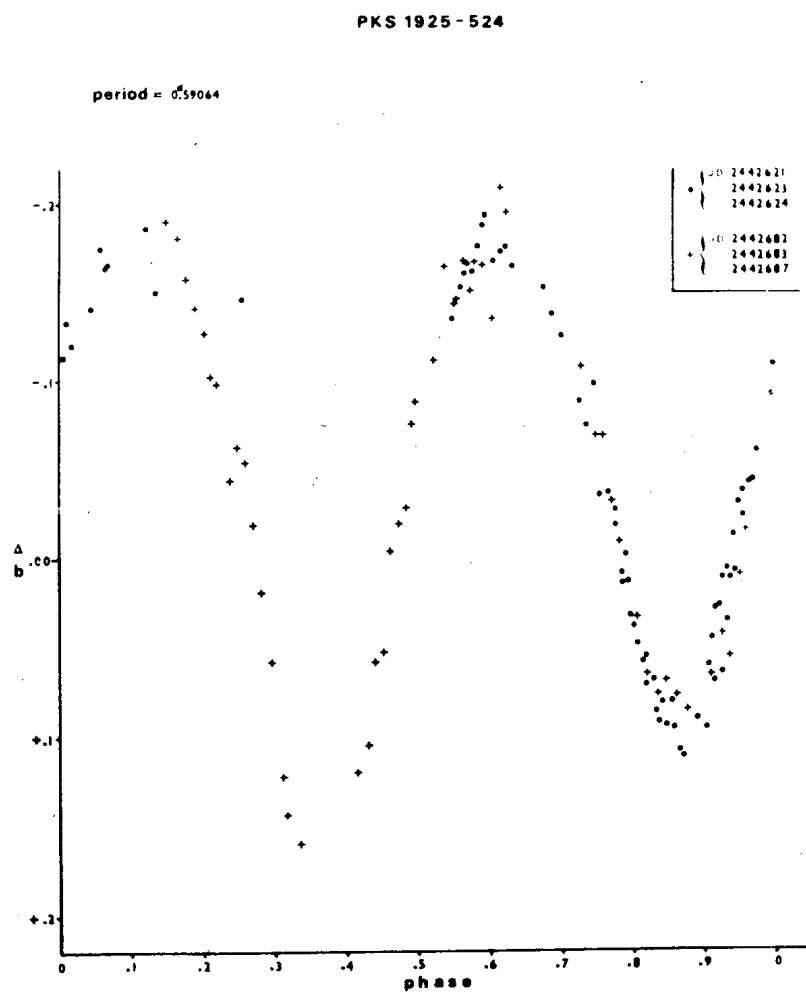
Fig. 1
 Finding chart for PKS
 1925-524 (vertical bars)
 showing comparison stars.

UBV observations were obtained in July 1975 with the 61 cm telescope of Bochum University located on La Silla. A description of this telescope and photometric equipment has been made by Schmidt-Kaler and Dachs (1968). A second set of UBV measurements was made two months later with the 61 cm telescope of the University of Toronto located on Las Campanas (Carnegie Southern Observatory).

All observations were made with star 8 as comparison and stars 2, 3 and 5 used as a check. Initial observations were mainly in B, so that this set of data was used for a period determination. The combined observations in instrumental b magnitudes are shown in Fig. 2 assuming a period of 0.59064 ± 0001 .

Fig. 2

Combined observations in instrumental b magnitudes
using star 8 as comparison



This period was derived using the method of Lafler and Kinman (1965). For secondary minimum the epoch is HJD 2442621.77477.

The mean range is 11.08 - 11.45 (B) with a secondary minimum at 11.35. The mean B-V remains virtually unchanged when going through secondary minimum; mean B-V at normal light is +.386 and +.384 in secondary minimum. At primary minimum B-V is about +.46, though this is based on rather limited data.

Several image tube spectra were obtained at 86 Å/mm with the 1.52 m telescope on La Silla. These, and additional ones with the 61 cm telescope on Las Campanas at 112 Å/mm, indicate a spectral type of late F. Tracings of the H β absorption profile show rapid variations of possibly suppressed emission. One hour of H β photometry also shows these fluctuations on a short time scale (~5 minutes).

It would seem that these data are indicative of a W UMa system. Further spectroscopic and photometric observations are planned for the coming year.

C. J. SMITH

European Southern Observatory
Casilla 16317, Santiago 9
Chile

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