

COMMISSIONS 27 AND 42 OF THE IAU  
 INFORMATION BULLETIN ON VARIABLE STARS

Number 3886

Konkoly Observatory  
 Budapest  
 27 May 1993

HU ISSN 0324 - 0676

**ON THE PERIOD OF THE CEPHEID CI Per**

Variability of CI Per was discovered by Hoffmeister (1944), who later published (Hoffmeister, 1947) the elements:

$$\text{Max JD hel} = 2429230.5 + 3^d 3779 \times E$$

Schmidt (1991) pointed out that the period  $3^d 3779$  is wrong, and derived a new one as  $3^d 767$ . However, Berdnikov (1992a) found that the current period was  $3^d 2963$ .

For investigation of the period of CI Per we have analysed all published observations, which are photoelectric ones only, with Hertzsprung's method. The computer version of this method (Berdnikov, 1992b) was used, as Berdnikov's (1992a) light curve served as the standard one. Normal maxima in filter V together with their errors and numbers (N) of observations utilized are listed in Table 1. These data were analysed with the least squares method (with weight being inversely proportional to error squares) and the following new ephemeris used for computing the O-C residuals listed in Table 1 was obtained:

$$\text{Max JD hel} = 2446298.815 + 3^d 297224 \times E \\
 \pm 0.045 \pm 0.000068$$

The plot of the residuals in Figure 1, however, shows that the period may undergo periodic and/or sudden changes. In the latter case the following values of the pulsation period can be derived from the existing data:

before JD 2447800	$P = 3^d 297525 \pm 0^d 000061;$
after JD 2447800	$P = 3^d 297074 \pm 0^d 000099.$

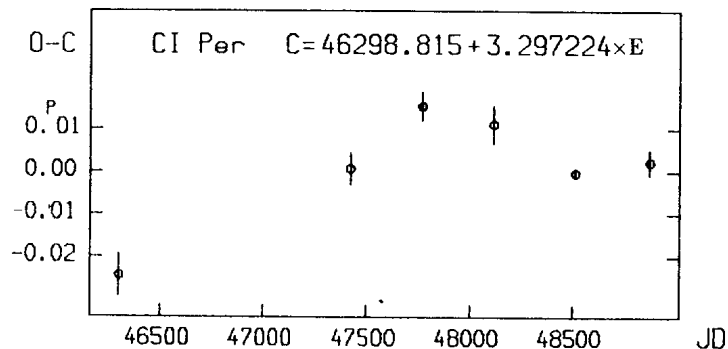


Figure 1

Table 1

Max JD hel	Error	N	E	O-C	Reference
2446298.734	$\pm 0.016$	15	0	-0.081	-0.024 Berdnikov, 1987
2447419.873	0.012	27	340	0.003	0.001 Berdnikov, 1992c
2447769.428	0.011	19	446	0.051	0.015 Berdnikov, 1992d
2448115.622	0.015	20	551	0.037	0.011 Berdnikov, 1992e
2448514.548	0.004	75	672	-0.001	0.000 Berdnikov, 1992a
2448877.252	0.010	26	782	0.008	0.002 Berdnikov, 1993

Obviously, more observations are needed to verify or to reject these results.

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