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BIBLIOGRAPHIC CATALOGUE OF VARIABLE STARS

At the Centre de Données Stellaires (Observatoire de Strasbourg, France) (CDS) the Bibliographic Catalogue of Variable Stars (BCVS) is being built up. Its contents is based on the card index of all known variable stars which has been maintained at the Sternwarte Sonneberg of the Zentralinstitut für Astrophysik, DDR, since the late forties under the supervision of H. Huth. The first part of the BCVS is now complete. For all variable stars with final designation it comprises references of the literature available since the completion of H. Schneller's and R. Prager's "Geschichte und Literatur des Lichtwechsels der Veränderlichen Sterne" (History and bibliography of the light-variations of variable stars) (with proper overlapping). A detailed description of the project is to be found in Bull. d' Inf. du CDS No. 20, p.105. We intend to supplement the BCVS at regular intervals. A similar catalogue is planned for all not-named variables (second part of the BCVS). The BCVS or specially selected samples can be ordered at the CDS on the conditions outlined in Bull. d' Inf. du CDS No. 23,p.131.

For the socialist currency area the

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acts as a sub-centre of the CDS and is in the position to provide data from this catalogue and other catalogues of the CDS without hard currency charges. We appeal to all interested workers in the field of variable stars to send preprints and/or reprints of their papers to

Sternwarte (Observatory)
Bibliothek (Library)
DDR-6400 Sonneberg

to guarantee the proper inclusion of the respective title in the BCVS.

W. WENZEL

Sternwarte Sonneberg des Zentralinstituts für
Astrophysik der Akademie der Wissenschaften der
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A NEW ULTRA-SHORT PERIOD DWARF NOVA: SW URSAE MAJORIS

The orbital period of the dwarf nova SW UMa has been determined from radial velocity variations of the H α emission line. The observations were obtained on 1982 Dec 27, and 1983 Feb 11-13 UT using the Mt. Lemmon 1.5-m reflector equipped with a Robinson-Wampler Image Dissector Scanner (Robinson and Wampler 1972). The radial velocities of the emission lines were measured using the method described in Shafter (1983). The resulting measurements yield the following ephemeris for the time of superior conjunction of the source of the broad H α emission (i.e. the accretion disk surrounding the white dwarf):

$$T = \text{HJD } 2445376.8601 + 0.0567433 E. \\ \pm .0008 \quad \pm .0000025$$

The orbital period of 0.0567433 days is the second shortest of any known dwarf nova. The dwarf nova WZ Sge has an orbital period which is ~ 5 seconds shorter (Robinson, Nather, and Patterson 1978).

In addition to the similarity of their orbital periods, SW UMa and WZ Sge have several other properties in common. For example, the amplitude of the radial velocity variation, K_1 , is $47 \pm 4 \text{ km s}^{-1}$ for SW UMa as compared to the upper limit of 38 km s^{-1} for WZ Sge obtained by Krzeminski and Kraft (1964). The relatively low value of K_1 for both of these systems is certainly not a result of low orbital inclination because, as is well known, WZ Sge is an eclipsing system while, in the case of SW UMa, the emission lines are quite broad (FWHM $\approx 1300 \text{ km s}^{-1}$) and there appears to be an $\sim 30\%$ modulation in the light curve with the orbital period indicating that $i > 40^\circ$ (Szkody 1983, private communication). Consequently, it appears that SW UMa like WZ Sge has a relatively large mass ratio, $q (=m_1/m_2)$.

In addition to their mass ratios, the outburst characteristics of the two stars appear to be somewhat similar. WZ Sge erupts every 32 years (Patterson et al. 1981) and, although the mean outburst period of SW UMa is not well known, it is probably also quite long (Glasby 1970). Finally, low dispersion spectra of SW UMa reveal broad Balmer absorptions at H β and H γ .