Title: UBVR photometry of

pre-catacylismic

binaries: HW Virginis **Authors:** Çakırlı, Ö.; Devlen, A.

Journal: Astronomy and Astrophysics

Astrophysics Supplement v 136

Supplement, v.136,

p.27-33

Publication Date: 04/1999

Keywords: STARS: HW VIR,

BINARIES: ECLIPSING, CATACLYSMIC VARIABLES

ADS: 1999A&AS..136...27C

Abstract

New UBVR light curves of the eclipsing binary HW Vir have been obtained. All the published times of primary and secondary eclipses have been collected. By adding the new times of the eclipses obtained by us, the general behavior of the O-C changes has been revealed. The updated O-C change seems to show a cyclic character. This behavior may be the result of whether rotation of the apsis connecting the star's centers or revolution of the couple around a third body. The former has been excluded due to the fact that the O-C values of primary and secondary eclipses show similar variation, i.e., not 180(deg) out of phase. Therefore the O-C changes have been analysed under the assumption of the light-time effect. The period of revolution around the third body was found to be 19 years. The time span following the discovery of eclipsing nature of the system covers 69 percent of the period predicted. The B, V and R light curves have been analysed by the WD code and the physical parameters of the components were obtained. The hotter, primary component is an sdB star with a temperature of about 36,000 K, and the cooler one is a late-type main sequence star with a temperature of 3300 K. The physical parameters derived for the secondary component are in accordance with the parameters of the theoretical models. This analysis indicates that the low mass, cooler secondary does not fill its critical Roche lobe. Therefore, mass accretion from the cool main sequence star to the hot sdB primary is not yet expected.

Title: Search for forced oscillations in binaries. III.

Improved elements and the detection of lineprofile variability of the B4V + A6V: system AR

Cassiopeiae

Authors: Holmgren, D. E.; Hadrava, P.; Harmanec, P.;

Eenens, P.; Corral, L. J.; Yang, S.; Ak, H.; Bozic,

Н.

Journal: Astronomy and Astrophysics, v.345, p.855-868.

Publication Date: 05/1999

Keywords: STARS: BINARIES: SPECTROSCOPIC, STARS:

FUNDAMENTAL PARAMETERS, STARS:

INDIVIDUAL: AR CAS

ADS: 1999A&A...345..855H

Abstract

An analysis of a new and extensive set of spectroscopic observations of the early-type binary system {AR Cas}, based also on spectral disentangling, has led to the discovery of the spectrum of the secondary star and of line-profile variations of the B4V primary star. A revised spectroscopic orbit based on these and published data is presented. We also present new photometric data, which have allowed us to improve the solution of the light curve and demonstrate the presence of apsidal motion. Determination of the basic physical parameters of the binary has allowed us to conclude that the system combines the main-sequence primary with an A6V: secondary, possibly an Am star. The consistency of our model of {AR Cas} is documented by a comparison of model atmosphere flux profiles with the profiles recovered from the spectral disentangling. Analysis of the He i 667.8 nm line indicates that line profile variability is present, and that these variations may be periodic.

3.

Title: X-Işın çift yıldızlarının fotometrik ve tayfsal incelenmesi

Authors: S.Özdemir

Journal: Doktora tezi, Ankara Üniv. Fen Bil. Ens.

Publication Date: 1999

Keywords:

ADS:

Abstract

Not Available

Yurt Dışı Bildiriler

1.

Title: Work fo the Reduction of Light Pollution in Turkey

Authors: Aslan, Z.

Journal: Preserving the Astronomical Sky, Proceedings of IAU Symposium

196, held 12-16 July 1999, in Vienna, Austria. Edited by R. J.

Cohen and W. T. Sullivan, 2001., p.151

Publication Date: 00/2001

Keywords:

ADS: <u>2001IAUS..196..151A</u>

Abstract

Not Available

Yurt İçi Bildiriler

1.

Title: Işık Kirliliği Authors: Aslan, Z.

Journal: XI. Ulusal Astronomi Kongresi, 7-10 Ağustos 1999, Fırat

Üniversitesi, Elazığ

Publication Date: 08/1999

Keywords:

ADS:

Abstract

Not Available

2.

Title: Bakırlıtepe'de Görüş ve Meteorolojik Durum

Authors: Ü.Kızıloğlu; V.Keskin; S.O.Selam

Journal: XI. Ulusal Astronomi Kongresi, 7-10 Ağustos 1999, Fırat

Üniversitesi, Elazığ

Publication Date: 09/1999

Keywords:

ADS:

Abstract

Not Available

3.

Title: CCD Görüntü İndirgeme ve Işık Ölçüm Analiz Teknikleri

Authors: S.Balman

Journal: XI. Ulusal Astronomi Kongresi, 7-10 Ağustos 1999, Fırat

Üniversitesi, Elazığ

Publication Date: 09/1999

Keywords:

ADS:
Abstract

Not Available

4.

Title: TÜBİTAK Ulusal Gözlemevi'nin 40 cm'lik Teleskobunun

Otomasyonu

Authors: V.Keskin; M.Koçak

Journal: XI. Ulusal Astronomi Kongresi, 7-10 Ağustos 1999, Fırat

Üniversitesi, Elazığ

Publication Date: 09/1999

Keywords:

ADS:

Abstract

Not Available

5.

Title: Etkin Çift Yıldız Sistemleri RT And ve ER Vul"un 1995-1998

Gözlemleri

Authors: F.Ekmekçi; F.F.Özeren; B.Albayrak

Journal: XI. Ulusal Astronomi Kongresi, 7-10 Ağustos 1999, Fırat

Üniversitesi, Elazığ

Publication Date: 09/1999

Keywords:

ADS:

Abstract

Not Available