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REPORTS ON NEW DISCOVERIES

The last issue of the volume publishes a list of newly discovered variables. Figures (finding charts and light curves) and data files are available electronically. Previous reports can be found in IBVS 5700.

The Editors

Date: 24 October 2007
Observer(s) and affiliation(s): Tiwari, S.K. - Aryabhata Research Institute of Observational Sciences, Manora Peak, Nainital - 263129, India Chaubey, U.S. - Aryabhata Research Institute of Observational Sciences, Manora Peak, Nainital - 263129, India Pandey, C.P. - Aryabhata Research Institute of Observational Sciences, Manora Peak, Nainital - 263129, India

HD 103498 is an A1 type magnetic star having surface magnetic field of about 2.5 kG and shows the lines of Sr, Eu and Cr in its spectrum (Cramer & Maeder, 1980). The Strömgren indices of HD 103498 are $b-y = 0.003$, $m_1 = 0.196$, $c_1 = 1.010$ and $\beta = 2.858$, (Hauck & Mermilliod, 1998). We observed this star on four nights between March and April 2007 with 104-cm telescope of ARIES Nainital, equipped with high-speed fast photometer and discovered 15-min oscillations. The observational and data reduction procedures are available in Tiwari, Chaubey & Pandey (2007).

The nightly observed mean amplitude of the oscillations are different from each other. The amplitude modulation may be due to either excitation of different modes or rotation of the star or both.

Acknowledgements: Dr. B.J. Medhi; DST Govt. of India, Grant No. SR/S2/HEP-20/2003.

RA(J2000) 11 55 11.33	Dec(J2000) +46 28 11.21	type DSCT	Mag. 7.026
Period 15.2 m		Epoch -	
Cross-identification(s): HD 103498 = BD +47 1914			

Date: 12 November 2007			
Observer(s) and affiliation(s): Liakos, A. - Dept. of Astrophysics, Astronomy and Mechanics, Faculty of Physics, National & Kapodistrian University of Athens, Athens, Greece, alliakos@phys.uoa.gr Niarchos, P. - Dept. of Astrophysics, Astronomy and Mechanics, Faculty of Physics, National & Kapodistrian University of Athens, Athens, Greece, pniarcho@phys.uoa.gr			
RA(J2000) 20 15 00.22	Dec(J2000) +76 54 18.28	type EA	Mag. 10.59 V (GSC)
Period 1.688778389d		Epoch 2454377.38222	
Cross-identification(s): GSC 4589-2999			

Date: 12 November 2007			
Observer(s) and affiliation(s): Zhang, X.B. - National Astronomical Observatories, Chinese Academy of Sciences, Beijing, 100012, China, xzhang@bao.ac.cn Luo, C.Q. - Dept. of Physics, China West Normal University, Sichuan, 637002, China Luo, Y.P. - Dept. of Physics, China West Normal University, Sichuan, 637002, China Deng, L.C. - National Astronomical Observatories, Chinese Academy of Sciences, Beijing, 100012, China, licai@bao.ac.cn			

The new variable is a certain member of the intermediate age open cluster NGC752 (Platais, 1991).

RA(J2000) 01 57 17.29	Dec(J2000) +37 40 51.6	type E	Mag. 13.10 (V)
Period -		Epoch -	
Cross-identification(s): NGC 752 170 = Cl* NGC 752 Stock 239 = Cl* NGC 752 PLA 758			

Date: 13 December 2007			
Observer(s) and affiliation(s): Agerer, F. - Bundesdeutsche Arbeitsgemeinschaft für veränderliche Sterne e.V., Munsterdamm 90, D-12169 Berlin, Germany, agerer.zweik@t-online.de			

Remark: In the field of V941 Cyg

RA(J2000) 19 41 29.36	Dec(J2000) +30 51 19.6	type EA	Mag. 12.93 (r USNO-B-1.0)
Period 1.125815 d		Epoch 2453611.435	
Cross-identification(s): GSC 2656-4286 = USNO-B-1.0 1208-0386457			

Date: 9 January 2008
Observer(s) and affiliation(s): Agerer, F. - Bundesdeutsche Arbeitsgemeinschaft für veränderliche Sterne e.V. (BAV), Munsterdamm 90, D-12169 Berlin, Germany, agerer.zweik@t-online.de

Remark: South-east of OR Cas (very close).

RA(J2000) 00 48 03.78	Dec(J2000) 60 51 28.5	type EW	Mag. 13.64 (USNO-B1.0 R2mag)
Period 0.318004 d		Epoch 2454002.631 (Min I)	
Cross-identification(s): USNO-B1.0 1508-0029126			

Remark: In the field of V459 Cas. Already published by Brat (2006), but no period was given there.

RA(J2000) 01 11 08.89	Dec(J2000) 61 07 45.1	type EW	Mag. 14.45 (USNO-B1.0 R1mag)
Period 0.302240		Epoch 2454092.275 (Min I)	
Cross-identification(s): USNO-B1.0 1511-0041416 = 2MASS J01110892+6107448 = LBvar010 Cas			

Date: 14 January 2008
Observer(s) and affiliation(s): Violat-Bordonau, Francisco - Caceres Astronomical Observatory, E10080, Caceres, Spain, fviolat@yahoo.es Arranz-Heras, Teofilo - "Las Pegueras" Observatorty, Navas de Oro, Segovia, Spain

Remark: BD +36 3317 is an A5 type star (Anthony-Twarog, 1984) located in the open cluster Stephenson 1, near the Delta2 Lyrae variable.

RA(J2000) 18 54 22.23	Dec(J2000) 36 51 07.4	type EA	Mag. 8.77 V (SIMBAD)
Period 4.30216 d		Epoch 2454437.25921 (Min I)	
Cross-identification(s): BD +36 3317 = SAO 67556 = TYC 2651-802-1			

Date: 15 January 2008

Observer(s) and affiliation(s):

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Remark: On the night of 26 September 2007 UT differential *uvby* photometry of two AO-type stars was carried out at the 1.5m telescope of the San Pedro Mártir Observatory, and HD 207331 proved to be variable (see 5900-f18). Confirming CCD observations were carried out on the night of 30 September 2007 UT at the 84cm telescope of the same observatory, and the light curve suggests strongly that this variable star is of the δ Scuti type with a period of about 1.17 hour (see 5900-f19). The position of this star in the $M_v(B - V)$ diagram also confirms this classification (see 5900-f21).

The staff of the San Pedro Mártir Observatory, Baja California, México, is gratefully thanked.

RA(J2000) 21 47 02.32	Dec(J2000) 43 19 18.6	type DSCT	Mag. 8.51 (B)
Period 0.04875 d		Epoch -	
Cross-identification(s): HD 207331 = BD+ 42 4207 = HIP 107557			

Date: 26 February 2008

Observer(s) and affiliation(s):

DeGennaro, S. - University of Texas at Austin

Williams, K. - University of Texas at Austin

Montgomery, M. - University of Texas at Austin

Remark: This object may represent a new class of variable star: the pulsating carbon atmosphere white dwarf, or DQV. The object found to pulsate with a single mode at 417.76 +/- 0.35 s with an amplitude of 1.7

The object was observed for 5 and 3 hours on two consecutive nights using the Argos high-speed photometer on the 2.1m Otto Struve reflector at McDonald Observatory. The period and amplitude were found to be stable between the two observations.

The figures show the light curves obtained for the two nights, smoothed by a Gaussian with a sigma of 1.25 observations (37.5 s), and the combined Fourier transform of the two data sets.

RA(J2000) 14 26 25.7	Dec(J2000) +57 52 18.4	type DQV(?)	Mag. 19.16 (g)
Period 417.76 s		Epoch -	
Cross-identification(s): SDSS J142625.71+575218.3			

Date: 11 March 2008

Observer(s) and affiliation(s):
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Cook, S.P. - 332 Weed Road, Weed, NM 88354-0499, USA
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Remark: This early-type, high luminosity emission line star (15' NE of Cepheid BM Persei) is an eclipsing binary (beta Lyr type?). Minima times were determined by Kwee and van Woerden (1956) method, and the period was determined by weighted least squares fitting of three best observed minima (Belserene, 1988a) and using DFT (Belserene, 1988b) on NSVS data (Wozniak et al., 2004).

RA(J2000) 04 28 39.623	Dec(J2000) 48 35 55.03	type EB?	Mag. 9.72 V (GSC)
Period 21.65 d		Epoch 2454516.1	
Cross-identification(s): BD +48 1098 = GSC 3333-1755 = PPM 47103 = ALS 7963 = NSVS 4287647 = NSVS 4265168			

Date: 9 September 2008

Observer(s) and affiliation(s):
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Niarchos, P. - National and Kapodistrian Univ. of Athens, Dept. of Astrophysics, Astronomy and Mechanics, pniarcho@phys.uoa.gr
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RA(J2000) 23 35 50	Dec(J2000) 48 43 43	type DSCT	Mag. 11.3 (GSC V)
Period 0.112625 d		Epoch -	
Cross-identification(s): GSC 3641-0359 = 2MASS 23355022+4843428			

RA(J2000) 19 54 39.5	Dec(J2000) 32 56 02.7	type DSCT	Mag. 10.8 (GSC V)
Period 0.0997415 d		Epoch -	
Cross-identification(s): GSC 2673-1583 = 2MASS 19543947+3256027			

Date: 29 January 2009

Observer(s) and affiliation(s):
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Remark: In the field of GSC 3377-0296, an RS CVn variable (Lloyd et al., 2007).

RA(J2000) 06 39 48.8	Dec(J2000) 46 57 15.1	type DSCT	Mag. 14.18 (R1mag - USNO B1.0)
Period 0.104430 d		Epoch 2454840.4195	
Cross-identification(s): USNO-B1.0 1369-0180384			

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ERRATUM FOR IBVS 5700

The epoch reported in IBVS 5700 for GSC 3355-0394 should be 2451537.61909 .