International Astronomical Union
Commission 42

BIBLIOGRAPHY OF CLOSE BINARIES

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The bibliographical entries for *Individual Stars* and *Collections of Data*, as well as a few *General* entries, are categorized according to the following coding scheme. Data from archives or databases, or previously published, are identified with an asterisk. The observation codes in the first four groups may be followed by one of the following wavelength codes.

- g. γ-ray
- i. infrared
- m. microwave
- o. optical
- r. radio
- u. ultraviolet
- x. x-ray

1. **Photometric data**
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   - b. Photoelectric
   - c. Photographic
   - d. Visual

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   - d. Spectrophotometry

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5. **Derived results**
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   - d. Elements derivable from velocity curves
   - e. Absolute dimensions, masses
   - f. Apsidal motion and structure constants
   - g. Physical properties of stellar atmospheres
   - h. Chemical abundances
   - i. Accretion disks and accretion phenomena
   - j. Mass loss and mass exchange
   - k. Rotational velocities

6. **Catalogues, discoveries, charts**
   - a. Catalogues
   - b. Discoveries of new binaries and novae
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     - γ-ray, x-ray, IR, or radio sources
   - d. Finding charts

7. **Observational techniques**
   - a. New instrument development
   - b. Observing techniques
   - c. Reduction procedures
   - d. Data-analysis techniques

8. **Theoretical investigations**
   - a. Structure of binary systems
   - b. Circumstellar and circumbinary matter
   - c. Evolutionary models
   - d. Loss or exchange of mass and/or angular momentum

9. **Statistical investigations**

10. **Miscellaneous**
    - a. Abstract
    - b. Addenda or errata

**Abbreviations**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>AD</td>
<td>accretion disk</td>
</tr>
<tr>
<td>BH</td>
<td>black hole</td>
</tr>
<tr>
<td>CB</td>
<td>close binary</td>
</tr>
<tr>
<td>CV</td>
<td>cataclysmic variable</td>
</tr>
<tr>
<td>EB</td>
<td>eclipsing binary</td>
</tr>
<tr>
<td>HMXB</td>
<td>high-mass x-ray binary</td>
</tr>
<tr>
<td>IP</td>
<td>intermediate polar</td>
</tr>
<tr>
<td>LC</td>
<td>light curve</td>
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<tr>
<td>LMXB</td>
<td>low-mass x-ray binary</td>
</tr>
<tr>
<td>NS</td>
<td>neutron star</td>
</tr>
<tr>
<td>QPO</td>
<td>quasi-periodic oscillation</td>
</tr>
<tr>
<td>RV</td>
<td>radial velocity</td>
</tr>
<tr>
<td>SB</td>
<td>spectroscopic binary</td>
</tr>
<tr>
<td>WD</td>
<td>white dwarf</td>
</tr>
<tr>
<td>WR</td>
<td>Wolf-Rayet star</td>
</tr>
</tbody>
</table>
Individual Stars

**TW And**

Manzoori, D. 2014, AN 335, 1064. (1ao*, 5abcej) LC solution of EB; O – C analysis shows period increase due to mass transfer and evidence for a third body.

**V342 And**

Dimitrov, W. et al. (15 authors) 2015, A&A 575, A101. (1ao, 2ao, 5cde, 6b) Eccentric-orbit EB.

**V363 And**

Nelson, R.H. 2014, IBVS No. 6115. (1a, 2a, 5abcde) Detached EB.

**V455 And**

Kononov, D.A. et al. (5 authors) 2015, ARep 59, 191. (1a, 5ci) A possible mechanism for the formation of humps in the orbital LCs of WZ Sge-type CVs.

**AE Aqr**

Hill, C.A. et al. (5 authors) 2014, MNRAS 444, 192. (2ao, 5bdegk) Roche tomography of K4 V secondary star of CV provides detailed surface mapping with large cool spots and evidence of differential rotation; masses and inclination are derived, and implications for dynamo theory and mass transfer rate are discussed.

**DY Aqr**

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**V729 Aql**


**V1343 Aql**

Atapin, K. et al. (4 authors) 2015, MNRAS 446, 893. (1ox, 5cgi, 8a) X-ray variability of SS 433: effects of the supercritical AD.

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Zhang, Z. et al. (5 authors) 2014, PASJ 66, 120. (2dx, 5gi) Probing the accretion scheme of dipping x-ray binary with Suzaku.

**V1408 Aql**

Hakala, P., Muhli, P., Charles, P. 2014, MNRAS 444, 3802. (1aio, 2dio, 5i) No signature of secondary of LMXB found by optical/near IR photometry; evidence for a precessing AD.


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**V1487 Aql**


**Reid, M.J. et al. (7 authors) 2014, ApJ 796, 2. (2g, 4a, 5e) Trigonometric parallax, mass of BH.


**HU Aqr**

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**V801 Ara**


Plant, D.S. et al. (5 authors) 2015, A&A 573, A120. (2dx, 5i) The truncated and evolving inner AD of the BH LMXB.

ε Aur


Strassmeier, K.G. et al. (6 authors) 2014, AN 335, 904. (1abo, 2ac, 5bcdgik) Time series high resolution spectroscopy and photometry from 2006 to 2013 covers complete eclipse of F0 supergiant by AD around secondary.

RW Aur
Antipin, S. et al. (14 authors) 2015, IBVS No. 6126. (1a, 7a) Resolved photometry of components.

V647 Aur (1RXS J063631.9+353537)

EW Boo

MY Cam
Lorenzo, J. et al. (7 authors) 2014, A&A 572, A110. (1ao, 2ao, 5bcede) A very massive merger progenitor.

45 Cnc
Griffin, R.E.M., Griffin, R.F. 2015, AN 336, 178. (2aa*bo, 5de) Orbital solution of SB2 (G8 III + A3 III).

BR CMi (HD 61273)
Harmanec, P. et al. (16 authors) 2015, A&A 573, A107. (1abo*, 2ao, 5bcd) Properties and nature of Be stars. 30. Reliable physical properties of the B9.5e + G8III semi-detached (SD) binary compared to other well studied emission-line SDs.

4 CVn
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η Car
Clementel, N. et al. (5 authors) 2014, MNRAS 443, 2475. (5j, 8b) 3D radiative transfer SPH simulations of interacting winds can serve as synthetic observations to confine the circumbinary ionization structure and mass loss rate.

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QU Car
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AL Cas
Qian, S.-B. et al. (7 authors) 2014, AJ 148, 79. (1ao, 5abc) Possible third body with P ≃ 86 years.

CW Cas
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IR Cas
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V523 Cas
Castelaz, M.W. 2014, IBVS No. 6120. (1a, 5ab, 6d) Another component in EB.

V615 Cas (LS I +61◦303)

Paredes-Fortuny, X. et al. (6 authors) 2015, A&A 575, L6. (1ao, 2do) Evidence of coupling between the thermal and nonthermal emission in the γ-ray HMXB.

V1001 Cas

V850 Cen
(304-1)
Postnov, K.A. et al. (6 authors) 2015, MNRAS 446, 1013. (1gx, 5cgj, 8d) Spin-up/spin-down of NS in binary system.

CQ Cep

δ Cir
Mayer, P. et al. (4 authors) 2014, AJ 148, 114. (1o*, 2a, 5adf) Apsidal motion in O-type binary with possibly binary third component.

BY Cir
(Samec 1995)

RT CrB
Xiang, F.-Y., Xiao, T.-Y., Yu, Y.-X. 2015, PASJ 67, 12. (1ao, 2ao, 5abcdeg) Starspot activity and period change.


CH Cyg

V444 Cyg
Lomax, J.R. et al. (11 authors) 2015, A&A 573, A43. (2dx, 3bo, 5j) Radiative and Coriolis forces shape the wind collision region in the WR binary.

V751 Cyg

V1341 Cyg
Cyg X-2

V1357 Cyg
Cyg X-1

V2246 Cyg
(EXO 2030+375)
Sell, P.H. et al. (9 authors) 2015, MNRAS 446, 3579. (1x, 2bc, 5cg) A detailed case study of the interstellar shell near the HMXB.

V2294 Cyg

V339 Del
(Nova 2013)


Tajitsu, A. et al. (5 authors) 2015, Nature 518, 381. (2cdo, 5h) Explosive Li production in classical nova.

AB Dor B
(Rst 137B)
Wolter, U. et al. (7 authors) 2014, A&A 570, A95. (2drux, 4b, 5eg) Masses, activity and age of the quadruple system. Star B is a CB labelled a/b.

CM Dra

OO Dra
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ZZ Eri \textit{Samec, R.G. et al.} (4 authors) 2015, AJ 149, 48. (1ao, 5abc) Pre-contact W UMa system with spots and possible third body.

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π¹ Gru \textit{Mayer, A. et al.} (15 authors) 2014, A&A 570, A113. (4ci, 5g, 8b) Two companions interacting with the wind of the RGB star and a possible hidden companion in the system.

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Bakowska, K. et al. (5 authors) 2014, AcA, 64, 337. (1a, 5ab, 6d) Eclipsing dwarf nova in the period gap.


RR Lyn \textit{Bensch, K. et al.} (15 authors) 2014, IBVS No. 6121. (2a, 5d) Spectroscopy of multiple EB.

EZ Lyn \textit{Isogai, M. et al.} (6 authors) 2015, PASJ 67, 7. (1ao, 2do, 5gjij) Optical dual-band photometry and spectroscopy of the WZ Sge-type dwarf nova during the 2010 superoutburst.

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OT Lyr \textit{Agerer, F.} 2014, IBVS No. 6123. (1a, 5a) Pulsating component in EB.

AU Mon \textit{Mennickent, R.E.} 2014, PASP 126, 821. (8acd) System with non-conservative mass transfer.


QV Nor \textit{Rodes-Roca, J.J. et al.} (5 authors) 2014, AN 335, 804. (1x, 2cdx, 5gj) Study of 2.1 keV absorption line of HMXB; possible origin either in O/Ne atmosphere of NS or in stellar wind.

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Prasad, V. et al. (4 authors) 2014, Ap&SS 353, 575. (1ao, 3ao, 5abc) Photometric and polarimetric studies of W UMa-type binary.

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Hauck, N., Griffin, R.F. 2015, Obs 135, 7. (1ao, 1o*, 2a, 5cde) Spectral types, masses and radii.

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del Palacio, S., Bosch-Ramon, V., Romero, G.E. 2015, A&A 575, A112. (8a) One-zone model insufficient for this HMXB.
NP Ser
(GX 17+2)
Bu, Q.-C. et al. (6 authors) 2015, ApJ 799, 2. (1x) Horizontal-branch oscillations and break components of NS LMXB.

NY Ser
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AY Sex
(PSR J1023+0038)
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GG Tau A
Dutrey, A. et al. (14 authors) 2014, Nature 514, 600. (4cr) Planet formation in multiple system.

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V725 Tau
(GX 245770)
Giovannelli, F. et al. (6 authors) 2015, AcA, 65, 107. (1aox, 5i) Optical and x-ray behaviour of HMXB in 2014.

16 UMa
Fekel, F.C. et al. (6 authors) 2015, AJ 149, 63. (2ao, 4b*, 5de) Secondary spectrum detected and measured.

AW UMa
Rucinski, S.M. 2015, AJ 149, 49. (2do, 5ghijk) Detailed atmospheric study with rapid sequence of high-resolution spectra.

KV UMa
(XTE J1118+480)

Plotkin, R.M. et al. (8 authors) 2015, MNRAS 446, 4098. (1rioux, 5cgi, 8a) Constraints on relativistic jets in quiescent BH x-ray binaries from broad-band spectral modelling.

LP UMa
Prasad, V. et al. (4 authors) 2014, Ap&SS 353, 575. (1ao, 5abc) Photometric studies of W UMa-type binary.

GP Vel
(Vel X-1)

Sidoli, L. et al. (7 authors) 2015, MNRAS 447, 1299. (1x, 5cg, 8a) Probing large-scale wind structures.

KQ Vel
(HD 94660)

AH Vir
Chen, M. et al. (4 authors) 2015, RAA 15, 275. (1abo, 5abc) Study of orbital period variations.

HT Vir
Bensch, K. et al. (15 authors) 2014, IBVS No. 6121. (2a, 5d) Spectroscopy of multiple EB.

NY Vir

UY Vol
(EXO 0748−676)

ER Vul
Xiang, Y. et al. (4 authors) 2015, MNRAS 447, 567. (2ab, 5deg, 8a) Doppler images showing strong starspot activities.

HR, HD, HDE, BD, CoD, CPD, SAO Objects

HR 2692
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(2ao, 4c, 5de) SB2 binary is member of quadruple system ADS 1652; orbits and masses of all 4 components determined.

HD 45088  
(see OU Gem)

HD 47129  
(see V640 Mon)

HD 50975  
Sperauskas, J. et al. (5 authors) 2014, A&A 570, A3. (1abo*, 2ao, 5cdeg)  
A yellow supergiant in a SB system.

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HD 61273  
(see BR CMi)

HD 94660  
(see KQ Vel)

HD 139388  
Davies, D. 2015, PZP 15, 1. (1a, 5c) Period solution for “Unsolved Variable” HD 139388.

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HD 207651  
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HDE 314884  
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2MASS J01325144−7425453 (SXP 265)  

MLS110213: 022733+130617

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2MASS J0227637+1156494  Liu, L. et al. (7 authors) 2015, AJ 149, 111. (1ao, 5ce) Contact binary of very short P; correct identification.


Galex J045456.8−702656  Schwarz, G.J. et al. (12 authors) 2015, AJ 149, 95. (1ouxi, 2ox, 5bgj) Fast (Nova LMC 2012) nova appears to be U Sco-type recurrent dwarf nova.

Swift J0513.4−6547  Coe, M.J. et al. (4 authors) 2015, MNRAS 447, 1630. (1aogx, 2be, 5bcdeg) A new Be/x-ray binary in LMC.


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2MASS J05393883−6944356  Alam, Md.S. et al. (5 authors) 2014, MNRAS 445, 4259. (1x,5cgi, 8a) Millihertz QPOs and broad iron line.

LMC X-1 4U 0614+091  (see V1055 Ori)

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EXO 0748−676  (see UY Vol)

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SDSS J093320.86+441705.4  Geier, S. et al. (20 authors) 2015, Science 347, 1126. (2do, 4ao) The fastest unbound star in our galaxy ejected by a thermonuclear SN Ia in a CB.

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XSS J1227.0−4859  de Martino, D. et al. (9 authors) 2014, MNRAS 444, 3004. (1aio, 2abcd, 5bi) LMXB studied by optical photometric and spectroscopic observations in low and high states.

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**XMMU J122939.7+075333**


**PSR B1259−63/LS 2883**


(see CPD −63°2495)

**2MASS J13142039+1320011**


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**PSR B1509−58**

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**4U 1538−52**

(see QV Nor)

**4U 1543−47**

(see IL Lup)

**XTE J1550−564**

(see V381 Nor)

**4U 1630−47**


**WD 1633+572**


**1RXS J163403.0−472344**

(Nor X-1)


**4U 1636−53**

(see V801 Ara)

**IGR J162842.31+101416.7**

Maxted, P.F.L. et al. (6 authors) 2014, MNRAS 444, 208. (1ao, 2ado, 5ce) Photometric and spectroscopic study of eclipsing EL CVn-type system (A2V + He WD precursor).

**4U 1630−47**


**1SWASP J162842.31+101416.7**

Maxted, P.F.L. et al. (6 authors) 2014, MNRAS 444, 208. (1ao, 2ado, 5ce) Photometric and spectroscopic study of eclipsing EL CVn-type system (A2V + He WD precursor).

**2FGL J1653.6−0159**


**MAXI J1659−152**

Rao Jassal, A., Vadawale, S.V. 2015, RAA 15, 45. (1ax, 2dx, 5ei) Variation of the inner disk radius during the onset of the 2010 outburst.

**XTE J1701−462**

Bu, Q.-C. et al. (6 authors) 2015, ApJ 799, 2. (1x) Horizontal-branch oscillations and break components of NS LMXB.

**IGR J16393−4643**

Islam, N. et al. (4 authors) 2015, MNRAS 446, 4148. (1x, 5ceg) A Suzaku view on the system.

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Hermes, J.J. et al. (12 authors) 2014, MNRAS 444, 1674. (1ao, 2acu, 5abch) Low-mass WD with heavy metal overabundance in binary with P = 5.9 h.

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Bozzo, E. et al. (4 authors) 2014, A&A 570, L2. (2dx) A 100 mHz QPO in the x-ray emission. Possibly a LMXB, or a WD tidally disrupting a terrestrial-icy planet.

**GRS 1741.9−2853**

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GRO J1744−28  

XMM J174457−2850.3  
Heinke, C.O. et al. (4 authors) 2015, MNRAS 447, 3034. (1x, 5cgi, 8a) Analysis of outburst LCs.

CXOGC J174540.0−290005  
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Van den Berg, M. et al. (4 authors) 2014, ApJ 793, 128. (1ai, 2dx, 4a, 6c) Discovery of near infrared counterpart; mass donor probably is not late-type giant.

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2MASS J18034033−2422427  
Sanchez-Bermudez, J. et al. (8 authors) 2014, A&A 572, L1. (4co) Resolving the stellar components of the massive multiple system with AMBER/VLTI.

SAX J1808.4−3658  
(see V4580 Sgr)

4U 1820−30  

PSR J1906+0746  

IRAS 19108+1541  
IGR J19149+1036
Cusumano, G. et al. (7 authors) 2015, MNRAS 446, 1041. (1x, 5bcg) Swift view on the system.
(see V1487 Aql)

GRS 1915+105
(see V1405 Aql)

4U 1915−05

2MASS J19285262+4053359
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2MASS J19293152+4053359

4U 1957+115
Bulut, I., Bulut, A. 2015, AcA, 65, 127. (1a, 5abcf) BVR photometric analysis.
(see V2246 Cyg)

2MASS J20271727+3756268
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(see BD +53°2790)

PSR J2129−0429

4U 2206+54

2MASS J22251603+4127520
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HE 2316−0909
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X-ray sources with constellation or galaxy names

Cyg X-1
Cyg X-2
Her X-1

(see V1357 Cyg)
(see V1341 Cyg)
(see HZ Her)
Holmberg IX X-1  

IC 10 X-1  

IC 342 X-1  
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LMC X-1  
LMC X-3  
M31 XB158  

NGC 3384 X-8  

Nor X-1  
X Sgr X-4  
Sco X-1  
Vel X-1  
(see 2MASS J05393883−6944356)
(see 1RXS J053855.6−640457)
(see 2MASS J20271727+3756268)
(see 2MASS J22251603+4127520)
(see 2MASS J18571534+5116316)
(see 2MASS J163403.0−472344)
(see 4U 1820−30)
(see V818 Sco)
(see GP Vel)

### Objects with other designations

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<td>LS I +61°303</td>
<td>(see HD 12889)</td>
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NGC 7789 V12  
Qian, S.B. et al. (7 authors) 2015, AJ 149, 38. (1ao, 5abc) Totally eclipsing contact binary in cluster.

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NLTT 33370 AB  
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OGLE-2013-BLG-0102LA,B  

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