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The bibliographical entries for *Individual Stars* and *Collections of Data* are categorized according to the following coding scheme:

1. **Observational data**
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   b. Spectroscopy
   c. Spectrophotometry
   d. Polarimetry
   e. Astrometry, interferometry
   f. Times of minima
   g. γ-ray data
   i. Infrared data
   o. Optical data
   p. Photographic data
   r. Radio data
   u. Ultraviolet data
   v. Visual estimates
   x. X-ray data

2. **Derived physical data**
   a. Orbital elements
   b. Absolute dimensions, masses
   c. New or improved ephemeris, period variations
   d. Apsidal motion
   e. Physical properties of stellar atmospheres
   f. Chemical abundances
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3. **Catalogues, discoveries, charts**
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   b. Discoveries of new binaries and novae
   c. Identification of optical counterparts of X-ray, IR, or radio sources
   d. Finding charts

4. **Observational techniques**

5. **Theoretical investigations**

6. **Statistical investigations**

7. **Miscellaneous**
   a. Abstract
   b. Addenda or errata

Abbreviations

AD	accretion disk	HMXB	high-mass x-ray binary	QPO	quasi-periodic oscillation
BH	black hole	IP	intermediate polar	RV	radial velocity
CB	close binary	LC	light curve	SB	spectroscopic binary
CV	cataclysmic variable	LMXB	low-mass x-ray binary	WD	white dwarf
EB	eclipsing binary	NS	neutron star	WR	Wolf-Rayet star

Individual Stars

λ And	*Mirtorabi, M.T., Wasatonic, R., Guinan, E.F.* 2003, AJ 125, 3265. (1aoi, 2e)
Z And	*Skopal, A.* 2003, A&A 401, L17. (1ao) Eclipse discovered. *Tomov, N. A., Taranova, O. G., Tomova, M. T.* 2003, A&A 401, 669. (1ao) Mass ejection during outburst of symbiotic binary.
RX And	*Godon, P., Sion, E.M.* 2003, ApJ 586, 427. (2b,5) Model mass of WD 1.2 solar masses.
GZ And	*Yang, Y., Liu, Q.* 2003, A&A 401, 631. (1ao, 2abc) Anomalously low luminosity for primary.
HP And	*Nogami, D. et al.* (7 authors) 2003, IBVS 5416. (3cd) HP And is a galaxy.
LL And	*Littlefair, S.P., Dhillon, V.S., Martín, E.L.* 2003, MNRAS 340, 264. (1b, 2eg, 6) Brown dwarf secondaries in CVs.
AE Aqr	*Meintjes, P.J., Venter, L.A.* 2003, MNRAS 341, 891. (1r, 2eg, 5) Modelling the non-thermal radio outbursts.
FF Aqr	*Vaccaro, T.R., Wilson, R.E.* 2003, MNRAS 342, 564. (1ab, 2abce) Investigating the role of fluorescence in UV active binaries.
FO Aqr	*Williams, G.* 2003, PASP 115, 618. (1a, 2g) Oscillation timings; spin-up of WD.
HU Aqr	*Schwope, A. D. et al.* (5 authors) 2003, A&A 402, 201. (1ab, 2g) Eclipsing polar. *Watson, C.A. et al.* (4 authors) 2003, MNRAS 341, 129. (1b, 2abg) Roche tomography and system parameters.
CI Aql	*Hachisu, I., Kato, M.* 2003, ApJ 588, 1003. (5) Successful model of this system applied to RX J0513.9-6951.
V417 Aql	*Shengbang, Q.* 2003, A&A 400, 649. (1f, 2c)
V603 Aql	*Borczyk, W., Schwarzenberg-Czerny, A., Szkody, P.* 2003, A&A 405, 663. (1ux) Variability study, new classification.
V1333 Aql (Aql X-1)	*Yu, W. et al.* (4 authors) 2003, ApJ 589, L33. (1bx) Hard X-ray flares in this NS system similar to those with BH's.
V1343 Aql (SS 433)	*McCormick, D.G., Spencer, R.E., Fender, R.P.* 2003, Ap&SS 288, 97. (1d)
V1487 Aql (GRS 1915+105)	*Das, T.K.* 2003, ApJ 588, L89. (5) Modelled shocked accretion flow in regulating QPO's. *Fender, R.P.* 2003, Ap&SS 288, 79. (1d, 2g) Circular polarization (see also General). *Fender, R.P.* 2003, MNRAS 340, 1353. (5) Uses and limitations of relativistic jet proper motions. *Fuchs, Y., Mirabel, I.F., Claret, A.* 2003, A&A 404, 1011. (1i, 2g) Mid-infrared observations. *Greenhough, J. et al.* (5 authors) 2003, MNRAS 340, 851. (1x, 2aceg) Identification of a 12-17 d time-scale in X-ray observations.
V1494 Aql	*Iijima, T., Esenoglu, H.H.* 2003, A&A 404, 997. (1b) Spectral evolution of nova.
BF Ara	*Kato, T. et al.* (8 authors) 2003, MNRAS 341, 901. (1av, 2cdg) Photometric study.
V821 Ara	*Buxton, M., Vennes, S.* 2003, MNRAS 342, 105. (1b, 2abce) Spectro-

(GX339-4)	scopic observations and orbital modulation.
	Corongiu, A. et al. (6 authors) 2003, A&A 408, 347. (1x) X-ray spectroscopy.
UX Ari	*Aarum Ulvås, V., Engvold, O.* 2003, A&A 402, 1043. (1bo)
	Aarum Ulvås, V., Henry, G. W. 2003, A&A 402, 1033. (1ao)
FS Aur	*Tovmassian, G. et al.* (9 authors) 2003, PASP 115, 725. (1ab, 2c) Markedly discordant spectroscopic and photometric periods.
IU Aur	*Özdemis, S. et al.* (5 authors) 2003, A&A 403, 675. (1aof, 2abc)
SV Cam	*Zboril, M., Djurašević, G.* 2003, A&A 406, 193. (1a, 2e) Spot activity study.
BY Cam	*Mouchet, M. et al.* (13 authors) 2003, A&A 401, 1071. (1bu, 2e)
WY Cnc	*Heckert, P.A.* 2003, IBVS 5419. (1a, 2c) 2001 and 2003 photometry.
GZ Cnc	*Tappert, C., Bianchini, A.* 2003, A&A 401, 1101. (1abo, 2ac)
BH CVn (HR 5110)	*Ransom. R.R. et al.* (7 authors) 2003, ApJ 587, 390. (1er,2b) Emission region with a core-halo morphololgy.
η Car	2003, IAU Circ. 8100 (1b) Changes of spectral feature.
	2003, IAU Circ. 8137 (1x) Highest X-ray flux.
	2003, IAU Circ. 8146 (1x) X-ray eclipse ingress?
	2003, IAU Circ. 8154 (1x) X-ray fading.
	2003, IAU Circ. 8160 (1ix) Continous fading.
	2003, IAU Circ. 8162 (1bor) Deepest phase.
V574 Car (WR30a)	*Paardekooper, S.J. et al.* (6 authors) 2003, A&A 404, L29. (1a, 2e) Dramatic brightness changes.
AB Cas	*Soydugan, F. et al.* (4 authors) 2003, AJ 126, 393. (2c) Period study.
V662 Cas (2S 0114 +650) (LS I +65 010)	*Koenigsberger, G. et al.* (5 authors) 2003, Rev. Mex. Astron. Astrofis. 39, 17. (1bc, 2eg) Line profile variability; circumbinary gas.
V741 Cas	*Griffin, R.F.* 2003, Observatory 123, 129. (1b, 2ac) Spectroscopic orbit of eclipsing system.
γ Cep	*Hatzes, A. et al.* (6 authors) 2003, Astron. Nachr. 324, Suppl. 2/2003, 1. (1b) high precision RV observations reveal possible planet.
VV Cep	*Pollmann, E.* 2003, IBVS 5398. (1b, 2e) Outside eclipse spectroscopy.
EE Cep	*Mikolajewski, M. et al.* (6 authors) 2003, IBVS 5412. (1abf, 3d) The start of the 2003 eclipse.
GW Cep	*Qian, S.* 2003, MNRAS 342, 1260. (1a, 2c, 6) Orbital period variations.
V497 Cep	*Yakut, K. et al.* (8 authors) 2003, A&A 405, 1087. (1ab, 2b) NGC 7160 member.
VY Cet	*Qian, S.* 2003, MNRAS 342, 1260. (1a, 2c, 6) Orbital period variations.
BR Cir (Cir X-1)	*Clark, J.S., et al.* (4 authors) 2003, A&A 400, 655. (1bi, 2g)
TV Col	*Retter, A. et al.* (8 authors) 2003, MNRAS 340, 679. (1ao, 2abcg) A new superhump period.
RW Com	*Yang, Y., Liu, Q.* 2003, PASP 115, 748. (1af, 2c)
AL Com	*Szkody, P. et al.* (5 authors) 2003, AJ 126, 1451. (1bci, 2e) HST spectra 5.5 years after superoutburst.
CC Com	*Yang, Y., Liu, Q.* 2003, PASP 115, 748. (1af, 2c)

GP Com	*Morales-Rueda, L. et al.* (6 authors) 2003, A&A 405, 249. (1b, 2g) Doppler tomography.
LM Com	*Shimansky, V.V., Borisov, N.V., Shimanskaya, N.N.* 2003, AZh 80, 830. (1bc, 2abe).
V691 CrA	*Cowley, A.P. et al.* (4 authors) 2003, AJ 125, 2163. (1ab, 2abe) LMXB.
U CrB	*Yerli, S.K. et al.* (5 authors) 2003, MNRAS 342, 1349. (1ab, 2abce) Orbital and system parameters. Evolutionary status.
CP Cru (Nova 1996)	*Lyke, J.E. et al.* (18 authors) 2003, AJ 126, 993. (1boi, 2f) Abundance anomalies.
Q Cyg (Nova 1876)	*Kafka, S. et al.* (4 authors) 2003, AJ 126, 1472. (1b, 2ce) P Cygni profiles indicate outflow.
CG Cyg	*Kjurkchieva, D.P., Marchev, D.V., Ogloza, W.* 2003, A&A 400, 623. (1abo, 2ab)
CH Cyg	*Hofmann, K.-H. et al.* (21 authors) 2003, Astron. Nachr. 324, Suppl. 2/2003, 68. (1i) Near IR interferometry.
V700 Cyg	*Qian, S.* 2003, MNRAS 342, 1260. (1a, 2c, 6) Orbital period variations.
V1341 Cyg (Cyg X-2)	*Clarkson, W.I. et al.* (4 authors) 2003, MNRAS 343, 1213. (1x, 2acg) Long-term properties of accretion discs.
	Vrtilek, S.D. et al. (7 authors) 2003, PASP 115, 1124. (1bcux, 2g) Simultaneous ASCA and HST/GHRS observations.
V1357 Cyg (Cyg X-1) (HD 226868)	*Barrio, F.E., Done, C., Nayakshin, S.* 2003, MNRAS 342, 557. (1x, 2eg, 5) Accretion geometries.
	Gierliński, M., Zdziarski, A.A. 2003, MNRAS 343, L84. (1x, 2eg) Discovery of millisecond flares.
	Félix Mirabel, I., Rodrigues, I. 2003, Science 300, 1119. BH formed in situ.
	Pottschmidt, K. et al. (9 authors) 2003, A&A 407, 1039. (1x) Long term variability study.
	Tarasov, A. E., Brocksopp, C., Lyuty, V. M. 2003, A&A 402, 237. (1box, 2g)
	Yao, Y. et al. (4 authors) 2003, ApJ 594, L43. (1bx) New method of resolving X-ray halos around point sources.
V1521 Cyg (Cyg X-3)	*Stark, M.J., Saia, M.* 2003, ApJ 587, L101. (1bx, 2b) Model mass of compact object less than 3.6 solar masses.
HR Del (Nova 1967)	*Selvelli, P., Friedjung, M.* 2003, A&A 401, 297. (1u, 2e)
AA Dor (LB 3459)	*Hilditch, R.W. et al.* (4 authors) 2003, MNRAS 344, 644. (1ai, 2abe) Improved photometric model.
	Rauch, T., Karl, C., Werner, K. 2003, Astron. Nachr. 324, Suppl. 2/2003, 71. (1b) Rotational velocity of sdOB primary from VLT UVES spectra.
	Rauch, T., Werner, K. 2003, A&A 400, 271. (1bu, 2a) Rotational velocity of sdOB primary.
AG Dra	*Friedjung, M. et al.* (4 authors) 2003, A&A 400, 595. (2c) Pulsation period of cool component.
EP Dra	*Bridge, C.M. et al.* (6 authors) 2003, MNRAS 341, 863. (1a, 2eg) Variability in the accretion stream and accretion region.
EX Dra	*Shafter, A.W., Holland, J.N.* 2003, PASP 115, 1105. (1af, 2ag)

GK Dra	*Griffin, R.F., Boffin, H.M.J.* 2003, Observatory 123, 203. (1b, 2ac) Spectroscopic orbit of eclipsing pulsating star. *Zwitter, T. et al.* (8 authors) 2003, A&A 404, 333. (1ab, 2b) Study for GAIA mission.
S Equ	*Soydugan, F. et al.* (4 authors) 2003, AJ 126, 393. (2c) Period study.
EF Eri	*Harrison, T.E. et al.* (7 authors) 2003, AJ 125, 2609. (1aio, 2e) Secondary appears to be irradiated brown dwarf.
α Gem	*Stelzer, B., Burwitz, V.* 2003, A&A 402, 719. (1bx) Both A and B resolved in simultaneous *CHANDRA* and *XMM-Newton* observations.
U Gem	*Godon, P., Sion, E.M.* 2003, ApJ 586, 427. (2g, 5) Modelled mass accreation rate on WD.
OW Gem	*Mikolajewski, M., Galan, C., Graczyk, D.* 2003, IBVS 5445. (1af, 2a) Multicolour observations of primary and secondary eclipses. *Terrell, D. et al.* (8 authors) 2003, AJ 126, 902. (1aoi, 2b) Double supergiant binary is an evolutionary puzzle.
AK Her	*Awadalla N.S.* 2003, Ap&SS 286, 401. (1a, 2c) Period study.
AM Her	*Watson, C.A. et al.* (4 authors) 2003, MNRAS 341, 129. (1b, 2abg) Roche tomography and system parameters.
DQ Her (Nova 1934)	*Mukai, K., Still, M., Ringwald, F.A.* 2003, ApJ 594, 428. (1abx) Soft X-rays arise from accretion disk wind?
HZ Her (Her X-1)	*Clarkson, W.I. et al.* (4 authors) 2003, MNRAS 343, 1213. (1x, 2acg) Long-term properties of accretion discs. *Leahy, D.A.* 2003, MNRAS 342, 446. (1u, 2eg) Modelling the EUV emission. *Manchanda, R. K.* 2003, A&A 4001, 1111. (1bx) *Naik, S., Paul, B.* 2003, A&A 401, 265. Comparison with LMC X-4.
RT Lac	*Çakırlı, Ö. et al.* (6 authors) 2003, A&A 405, 733. (1a) Long-term photometric behaviour.
EM Lac	*Qian, S.* 2003, MNRAS 342, 1260. (1a, 2c, 6) Orbital period variations.
UV Leo	*Zwitter, T. et al.* (8 authors) 2003, A&A 404, 333. (1ab, 2b) Study for GAIA mission.
XY Leo	*Yakut, K. et al.* (4 authors) 2003, A&A 401, 1095. (1ao, 2ac)
UZ Lib	*Gondoin, P.* 2003, A&A 400, 249. (1bx, 2e)
β Lyr	*Leone, F. et al.* (5 authors) 2003, A&A 405, 223. (1d) Phase dependent magnetic field.
V511 Lyr	*Griffin, R.F.* 2003, Observatory 123, 129. (1b, 2ac) Spectroscopic orbit of eclipsing system.
V524 Mon	*Samec, R.G., Loflin, T.S.* 2003, IBVS 5404. (1af, 2c, 3d) First CCD observations of dwarf CB.
V616 Mon	*Hynes, R.I. et al.* (6 authors) 2003, MNRAS 340, 447. (1a, 2eg, 3b) Study of the short-time-scale flaring.
V838 Mon	2003, IAU Circ. 8110 (1x) Evidence against nova-like outburst.
UY Mus	*McKenzie, R., Samec, R.G., Faulkner, D.G.* 2003, IBVS 5405. (1ac, 3d) CCD observations of the short period near contact system.
GR Mus (X 1254-690)	*Boirin, L., Parmar, A.N.* 2003, A&A 407, 1079. (1x) Discovery of narrow X-ray absorption features.
GU Mus (GRS 1124-68)	*Hynes, R.I. et al.* (6 authors) 2003, MNRAS 340, 447. (1a, 2eg, 3b) Study of the short-time-scale flaring.

	Khruzina, T.S. et al (5 authors) 2003, AZh 80, 675. (1a, 2b, 5).
IM Nor	*Woudt, P.A., Warner, B.* 2003, MNRAS 343, 313. (1a, 2aceg) High-speed photometry.
V841 Oph	*Diaz, M.P., Ribiero, F.M.A.* 2003, AJ 125, 3359. (1b, 2ac)
V2502 Oph (HR 6844)	*Fekel, F.C., Henry, G.W.* 2003, AJ 125, 2156. (1ab, 2ae) Primary is γ Dor variable.
V2573 Oph	2003, IAU Circ. 8166 (1ab, 3b) New nova. 2003, IAU Circ. 8167 (1a) Additional magnitudes. 2003, IAU Circ. 8175 (1b) Nova emission lines. 2003, IAU Circ. 8186 (1bi) No emission features in infrared.
χ^1 Ori	*König, B. et al.* (5 authors) 2003, Astron. Nachr. 324, Suppl. 2/2003, 11. (1o) Direct detection of 0.15 $M_\odot$ companion of 1.01 $M_\odot$ primary with Keck NRC2 adaptive optics system.
ER Ori	*Kim, C.-H. et al.* (5 authors) 2003, AJ 126, 1555. (1af, 2ac) Mass transfer rate, light-time orbit of third body.
V1309 Ori	*Katajainen, S. et al.* (9 authors) 2003, MNRAS 340, 1. (1abdx, 2abceg) UBVRI photopolarimetry and modelling. *Schwarz, K., Reinsch, K., Burwitz, V.* 2003, Astron. Nachr. 324, Suppl. 2/2003, 29. (1x) X-ray light curve of eclipsing magnetic CV.
NP Pav	*Cerruti, M.A.* 2003, Rev. Mex. Astron. Astrofis. 39, 141. (1a, 2ab)
II Peg	*Gu, S.-H. et al.* (4 authors) 2003, A&A 405, 763. (1b, 2e) Doppler imaging.
IP Peg	*Watson, C.A. et al.* (4 authors) 2003, MNRAS 341, 129. (1b, 2abg) Roche tomography and system parameters.
MS Peg	*Shimansky, V.V., Borisov, N.V., Shimanskaya, N.N.* 2003, AZh 80, 830. (1bc, 2abe).
β Per	*Drake, J.J.* 2003, ApJ 594, 496. (1bx) C and N abundances indicate Algol b must have lost at least half of its initial mass.
GK Per	*Bianchini, A. et al.* (4 authors) 2003, PASP 115, 474. (1bc, 2g) Magnetic accretion during 2002 outburst.
RR Pic	*Schmidtobreick, L., Tappert, C., Saviane, I.* 2003, MNRAS 342, 145. (1b, 2ceg) Doppler tomography of the emission distribution.
AO Psc	*Williams, G.* 2003, PASP 115, 618. (1a, 2g) Oscillation timings; spin-up of WD.
V348 Pup	*Froning, C.S., Long, K.S., Baptista, R.* 2003, AJ 126, 964. (1bcu, 2g) HST observations of nova-like CV.
VW Pyx	*Exter, K.M., Pollacco, D.L., Bell, S.A.* 2003, MNRAS 341, 1349. (1ab, 2abe) A first model of the planetary nebula binary.
WZ Sge	*Long, K.S. et al.* (6 authors) 2003, ApJ 591, 1172. (1bu) FUSE observations of 2001 outburst. *Osaki, Y.* 2003, PASJ 55, 841. (1o, 2g, 5) Helical tomography of an AD, a new method for analyzing complex superhump LCs for the 2001 superoutburst. *Sion, E.M. et al.* (11 authors) 2003, ApJ 592, 1137. (1bu) Unexpected outburst of dwarf nova.
V4006 Sgr	2003, IAU Circ. 8113 (1a, 3b) Possible nova. 2003, IAU Circ. 8115 (7) No new nova.
V4134 Sgr	*Angelini, L, White, N.E.* 2003, ApJ 586, L71. (1bx) Detection of a fossil

(4U 1755-33)	jet evidence of BH.
V4580 Sgr (SAX J1808.4-3658)	*Burderi, L. et al.* (5 authors) 2003, A&A 404, L43. (1a) Study of optical counterpart. *Menna, M.T. et al.* (5 authors) 2003, ApJ 589, 503. (1bu) Coupling between periodic and aperiodic variability. *Poutanen, J., Gierliński, M.,* 2003, MNRAS 343, 1301. (1x, 2beg) On the nature of the X-ray emission and physical parameters.
V4641 Sgr	2003, IAU Circ. 8180 (1r) Renewed radio activity. *Butt, Y.M. Maccarone, T.J., Prantzos, N.* 2003, ApJ 587, 748. (5) Suggest misaligned jets induce light element nucleosynthesis. *Chaty, S. et al.* (6 authors) 2003, MNRAS 343, 169. (1aboi, 2be) A model based on photometric and spectroscopic observations. *Goranskii, V.P., Barsukova, E.A., Burenkov, A.N.* 2003, AZh 80, 805. (1abc, 2ab).
V4742 Sgr	*Morgan, G.E., Ringwald, F.A., Prigge, J.W.* 2003, MNRAS 344, 521. (1ab, 2ef) Spectroscopic study.
V4743 Sgr	2003, IAU Circ. 8107 (1x) Spectral features. 2003, IAU Circ. 8131 (1aox) V-magnitudes and X-ray features. 2003, IAU Circ. 8132 (1abio) New observations. 2003, IAU Circ. 8176 (1aox) Substantial change in light curve. *Morgan, G.E., Ringwald, F.A., Prigge, J.W.* 2003, MNRAS 344, 521. (1ab, 2ef) Spectroscopic study. *Ness, J.-U. et al.* (5 authors) 2003, Astron. Nachr. 324, Suppl. 3/2003, 139. (1x) 22 min oscillations detected in X-ray light curve of super-soft source. *Ness, J.-U. et al.* (17 authors) 2003, ApJ 594, L127. (1abx) Low transmission spectrometer observation shows 22 minute oscillation. *Nielbock, M., Schmidtobreick, L.* 2003, A&A 400, L5. (1br, 2e) Millimeter radiation from nova.
V4745 Sgr	2003, IAU Circ. 8123 (1ab, 3b) Possible new nova. 2003, IAU Circ. 8124 Designation of nova. 2003, IAU Circ. 8126 (1a) R and V magnitudes. 2003, IAU Circ. 8127 (1a) Magnitudes and colours. 2003, IAU Circ. 8155 (1ao) Optical brightening. 2003, IAU Circ. 8160 (1a) Additional photometry.
U Sco	*Kato, M., Hachisu, I.* 2003, ApJ 587, L39. (5) Suggest very fast bipolar mass outflow.
V818 Sco (Sco X-1)	*Abramowicz, M.A. et al.* (4 authors) 2003, A&A 404, L21. (5) 2:3 resonance in kHz QPOs. *Barnard, R., Church, M.J., Balucińska-Church, M.* 2003, A&A 405, 237. (1x) Study of X-ray flaring. *Bradshaw, C.F., Geldzahler, B.J., Fomalont, E.B.* 2003, ApJ 592, 486. (1abx) Spectral changes. *Vanderlinde, K.W., Levine, A.M., Rappaport, S.A.* 2003, PASP 115, 739. (1ax, 2c) Detection of orbit by RXTE all-sky monitor.
V1033 Sco (GRO J1655-40)	*Butt, Y.M., Maccarone, T.J., Prantzos, N.* 2003, ApJ 587, 748. (5) Suggest misaligned jets induce light element nucleosynthesis. *Fender, R.P.* 2003, MNRAS 340, 1353. (5) Uses and limitations of relativistic jet proper motions.

	Stevens, J.A. et al. (5 authors) 2003, MNRAS 342, 623. (1r, 2eg, 5) Study of the radio flaring behaviour.
V475 Sct	2003, IAU Circ. 8190 (3b) Possible nova. 2003, IAU Circ. 8191 (1b) Spectroscopic features. 2003, IAU Circ. 8199 (1be) Classification as normal nova. 2003, IAU Circ. 8200 (1a) Designation of new nova.
MS Ser	*Alekseev, I., Yu., Kozlova, O. V.* 2003, A&A 403, 205. (1abd) Spots and active regions.
RW Sex	*Prinja, R.K. et al.* (7 authors) 2003, MNRAS 340, 551. (1u, 2aeg) UV observations and disc wind model.
HK Tau	*Duchêne, G. et al.* (4 authors) 2003, A&A 400, 559. (1er) Circumstellar disk around A and B.
V471 Tau	*Drake, J.J., Sarna, M.J.* 2003, ApJ 594, L55. (1bx) Evidence for common envelope phase.
V711 Tau (HR 1099)	*García-Alvarez, D. et al.* (7 authors) 2003, A&A 402, 1073. (1abo)
V781 Tau	*Zwitter, T. et al.* (8 authors) 2003, A&A 404, 333. (1ab, 2b) Study for GAIA mission.
V1094 Tau	*Griffin, R.F., Boffin, H.M.J.* 2003, Observatory 123, 203. (1b, 2ac) Spectroscopic orbit of eclipsing star.
V1154 Tau	*Dallaporta, S., Munari, U., Zwitter, T.* 2003, IBVS 5413. (1a, 2c) New EB within a triple system.
RW Tri	*Poole, T. et al.* (5 authors) 2003, MNRAS 340, 499. (1b, 2abe) Orbital elements and component star masses.
CF Tuc	*Innis, J.L. et al.* (4 authors) 2003, IBVS 5444. (1a, 2c) Period change in RS CVn binary.
BE UMa	*Raguzova, N.V., Shugarov, S.Yu., Ketsaris, N.A.* 2003, AZh 80, 535. (1a, 2ab, 5).
HH UMa	*Pribulla, T. et al.* (4 authors) 2003, IBVS 5414. (1af, 2c) New contact binary.
IY UMa	*Smak, J.* 2003, Acta Astronomica 53, 167. (2g) Disk eclipse.
KS UMa	*Olech, A. et al.* (6 authors) 2003, Acta Astronomica 53, 175. (1a, 2c, 3d) Superhump period change in dwarf nova.
KV UMa (XTE J1118+480)	*Frontera, F. et al.* (8 authors) 2003, ApJ 592, 1110. (1bx) BeppoSAX observations. *Kanbach, G. et al.* (5 authors) 2003, Astron. Nachr. 324, Suppl. 2/2003, 23. (1ox) Correlated X-ray/optical variability of transient X-ray binary. *Malzac, J. et al.* (4 authors) 2003, A&A 407, 335. (1aox) Study of optical and X-ray flickering. *McClintock, J.E. et al.* (6 authors) 2003, ApJ 593, 435. (1boux) Black hole binary in quiescence.
LP UMa (GSC 3822-1056)	*Csizmadia, Sz., Bíró, I.B., Borkovits, T.* 2003, A&A 403, 637. (1ao, 2ac) Recently formed over-contact binary.
RW UMi (Nova 1956)	*Bianchini, A. et al.* (6 authors) 2003, PASP 115, 811. (1a, 2cg) Quasi-periodic oscillations of post-nova.
GP Vel (Vela X-1) (4U 0900-40)	*La Barbera, A. et al.* (4 authors) 2003, A&A 400, 993. (1bx) BeppoSAX observations of HMXB. *Quaintrell, H. et al.* (8 authors) 2003, A&A 401, 313. (1bo, 2ab)

MR Vel (RX J0925.7-4758)	*Mennickent, R.E., Matsumoto, K., Diaz, M.* 2003, A&A 402, 315. (1bi, 2ef)
MM Vel	*Hynes, R.I. et al.* (6 authors) 2003, MNRAS 340, 447. (1a, 2eg, 3b) Study of the short-time-scale flaring.
V382 Vel (Nova 1999)	*Augusto, A., Diaz, M.P.* 2003, AJ 125, 3349. (1b, 2ef) Spectral evolution.
η Vir	*Hummel, C.A. et al.* (10 authors) 2003, AJ 125, 2630. (1e, 2ab) Spectroscopic subsystem resolved with NPOI.
AW Vir	*Qian, S.* 2003, MNRAS 342, 1260. (1a, 2c, 6) Orbital period variations.
HV Vir	*Ishioka, R. et al.* (15 authors) 2003, PASJ 55, 683. (1a) Period increase of superhumps found in the 2002 superoutburst.
BP Vul	*Torres, G., Guilbault, P.R.* 2003, IBVS 5421. (1af, 2c) Times of minimum determined from archival photographic plates.
ER Vul	*Çakirli, Ö. et al.* (4 authors) 2003, A&A 400, 257 (1b, 2ab) *Duemmler, R. et al.* (5 authors) 2003, A&A 402, 745. (1bo, 2abc) *Kjurkchieva, D.P., Marchev, D.V., Zola, S.* 2003, A&A 404, 611. (1ab, 2b)
QQ Vul	*Kafka, S., Honeycutt, R.K.* 2003, AJ 125, 2188. (1a, 2g) Changes in light curve over 10 years. *Watson, C.A. et al.* (4 authors) 2003, MNRAS 341, 129. (1b, 2abg) Roche tomography and system parameters.

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

HR 1099	(see V711 Tau)
HR 5110	(see BH CVn)
HR 6844	(see V2502 Oph)
HD 434	*Budaj, J. et al.* (6 authors) 2003, IBVS 5423. (1b, 2b) Presence of the secondary spectrum.
HD 21771/2	*Griffin, R.F., Carquillat, J.-M., Ginestet, N.* 2003, Observatory 123, 69. (1b, 2a) Composite spectrum.
HD 23642	*Torres, G.* 2003, IBVS 5402. (1a, 3b) Discovery of bright EB in Pleiades.
HD 23850	*Paczynski, B.* 2003, Acta Astronomica 53, 209. (1be) Distance to Pleiades.
HD 27149	*Tomkin, J.* 2003, Observatory 123, 1. (1b, 2ab)
HD 36402 (Sk -67°104)	*Koenigsberger, G., Moffatt, A.F.J., Auer, L.H.* 2003, Rev. Mex. Astron. Astrofis. 39, 213. (1bu, 2e) Atmosphere and wind study.
HD 66066A	*González, J.F., Lapasset, E.* 2003, A&A 404, 365. (1b, 2a) Spectroscopic orbit of cluster binary.
HD 100054B	*Ginestet, N. et al.* (4 authors) 2003, MNRAS 342, 61. (1b, 2abc) Orbital elements and physical parameters.
HD 108642	*Budaj, J. et al.* (6 authors) 2003, IBVS 5423. (1b, 2b) Presence of the secondary spectrum.
HD 112914	*Boffin, H.M.J., Pourbaix, D.* 2003, Observatory 123, 126. (2ab) Reanalysis of astrometry using spectroscopic orbit.
HD 153919	*Boroson, B. et al.* (4 authors) 2003, ApJ 592, 516. (1abx)

(4U 1700-37)	*Hammerschlag-Hensberge, G., van Kerkwijk, M. H., Kaper, L.* 2003, A&A 407, 685. (1u, 2a) Orbit revisited.
HD 187258	*Ginestet, N. et al.* (4 authors) 2003, MNRAS 342, 61. (1b, 2abc) Orbital elements and physical parameters.
HD 191110	*Catanzaro, G., Leone, F., Leto, P.* 2003, A&A 407, 669. (1bc, 2af) Abundance analysis.
HD 219542	*Sadakane, K., Ohkubo, M., Honda, S.* 2003, PASJ 55, 1005. (1a, 2f) Differential abundance analysis of A and B components.
HD 226868	(see V1357 Cyg)
HD 315031	*González, J.F., Lapasset, E.* 2003, A&A 404, 365. (1b, 2a) Spectroscopic orbit of cluster binary.
BD+14°5016	*Maciejewski, G., Ligeza, P., Karska, A.* 2003, IBVS 5400. (1ab, 2b) Spectroscopic and photometric solution.
BD+05°706	*Torres, G. et al.* (5 authors) 2003, AJ 125, 3237. (1abox, 2abe)
CPD - 41° 7742	*Sana, H. et al.* (4 authors) 2003, A&A 405, 1063. (1b, 2a) High-resolution optical spectroscopy.

X-ray sources with constellation names

Aql X-1	(see V1333 Aql)
Cir X-1	(see BR Cir)
Cyg X-1	(see V1357 Cyg)
Cyg X-2	(see V1341 Cyg)
Cyg X-3	(see V1521 Cyg)
Her X-1	(see HZ Her)
Sgr X-1 (GX 3+1)	*den Hartog, P. R. et al.* (9 authors) 2003, A&A 400, 633. (1x, 2e) BeppoSAX data for LMXB.
Sco X-1	(see V818 Sco)
Vel X-1	(see GP Vel)

Object names including RA and DEC

RX J0048.4-7332	(see SMC X-3)
RX J0058.2-7231	*Schmidtke, P.C., Cowley, A.P., Levenson, L.* 2003, AJ 126, 1017. (2cg) Anaylsis of MACJO and OGLE photometry reveals periodicities.
2S 0114 +650	(see V662 Cas)
PSR J0218+4232	*Bassa, C.G., van Kerkwijk, M.H., Kulkarni, S.R.* 2003, A&A 403, 1067. (1abo, 2b) WD companion of pulsar.
RX J0513.9-6951	*Hachisu, I., Kato, M.* 2003, ApJ 588, 1003. (5) Clue to transition mechanism between optical high and low states.
	Hachisu, I., Kato, M. 2003, ApJ 590, 445. (5) First example of accretion wind evolution.
1RXS J062518.2+733433	*Araujo-Betancor, S. et al.* (5 authors) 2003, A&A 406, 213. (1ab) New intermediate polar.
EXO 0748-676	*Jimenez-Garate, M.A., Schulz, N.S., Marshall, H.L.* 2003, ApJ 590, 432. (1bx, 2g) Study of photoionized plasma above AD.

RX J0806.3+1527	*Hakala, P. et al.* (7 authors) 2003, MNRAS 343, L10. (1ar, 2ac) Period analysis. *Strohmayer, T.E.* 2003, ApJ 593, L39. (1abx, 2bc) Double-degenerate binary shows high frequency variation.
4U 0900-40	(see GP Vel)
RX J0925.7-4758	(see MR Vel)
XTE J0929-314	*Juett, A.M., Galloway, D.K., Chakrabarty, D.* 2003, ApJ 587, 754. (1bx) Observed during 2002 outburst.
XTE J1118+48	(see KV UMa)
GRS 1124-68	(see GU Mus)
X 1254-690	(see GR Mus)
SDSS J132723.39+652854.2	*Wolfe, M.A. et al.* (6 authors) 2003, PASP 115, 1118. (1abd, 2ac) Probable new SW Sex star.
PSR B1534+12	*Konacki, M., Wolszczan, A., Stairs, I.H.* 2003, ApJ 589, 495. (5) Method developed to detect geodetic spin precession.
XTE J1550-564	2003, IAU Circ. 8100 (1x) New outburst. 2003, IAU Circ. 8102 (1ao) High speed photometry. *Gierliński, M., Done, C.* 2003, MNRAS 342, 1083. (1gx, 2eg) The X-ray/γ-ray spectrum in the very high state.
IGR J16318-4848	*Matt, G., Guainazzi, M.* 2003, MNRAS 341, L13. (1x, 2e) Study of the properties of the absorbing and line-emitting material.
IGR J16320-4751 (AX J1631.9-4752)	2003, IAU Circ. 8096 (1x) Spectral transitions similar to x-ray binaries. *Rodriguez, J. et al.* (7 authors) 2003, A&A 407, L41. (1x) Accurate X-ray position.
IGR J16358-4726	2003, IAU Circ. 8097 (1g) Discovery of variable source. 2003, IAU Circ. 8109 (1x) Spin or orbital oscillation?
XTE J1650-500	*Homan, J. et al.* (8 authors) 2003, ApJ 586, 1262. (1bx, 2b) BH mass estimate of 8.2 solar masses.
GRO J1655-40	(see V1033 Sco)
MXB 1659-29	*Wijnands, R. et al.* (6 authors) 2003, ApJ 594, 952. (1abx) Observation of neutron star-eclipsing binary in quiescence.
4U 1700-37	(see HD 153919)
4U 1708-40	*Migliari, S. et al.* (9 authors) 2003, MNRAS 342, 909. (1x, 2eg) Discovery of type I X-ray bursts.
RX J170930.2-263927	*Jonker, P.G. et al.* (5 authors) 2003, MNRAS 341, (XTE J1709-267) 823. (1x, 2abe) Analysis of Chandra observations.
4U 1728-34	*Galloway, D.K. et al.* (4 authors) 2003, ApJ 590, 999. (1abx) Thermonuclear X-ray bursts as distance indicators: systematic trends and symmetry in bursts. *Migliari, S. et al.* (7 authors) 2003, MNRAS 342, L67. (1rx, 2eg) Evidence for disc-jet coupling. *Shaposhnikov, N., Titarchuk, L., Haberl, F.* 2003, ApJ 593, L35. (1ax, 2bg)
MXB 1730-335	*Mahasena, P. et al.* (4 authors) 2003, PASJ 55, 827. (1x) Type II burst properties of the rapid burster.
PSR J1740-5340	*Sabbi, E. et al.* (7 authors) 2003, ApJ 589, L41. (1bo) H alpha profile studied - no AD, but evaporating stream.
1E 1743.1-2843	*Porquet, D. et al.* (7 authors) 2003, A&A 406, 299. (1x) BH candidate.

IGR J17464-3213 (XTE J17464-3213)	2003, IAU Circ. 8105 (1r) Radio counterpart of BH candidate. 2003, IAU Circ. 8112 (1ir) Infrared counterpart.
GRS 1747-312	*in't Zand, J.J.M. et al.* (9 authors) 2003, A&A 406, 233. (1x) First detection of thermonuclear X-ray bursts.
XTE J1751-305	*Jonker, P.G. et al.* (17 authors) 2003, MNRAS 344, 201. (1abi, 2g, 3c) Search for optical and near-infrared counterpart.
4U 1755-33	(see V4134 Sgr)
XTE J1807-294	2003, IAU Circ. 8095 (1x, 2c) Shortest period accreting millisecond pulsars. 2003, IAU Circ. 8113 (1x) Orbital modulation barely visible. *Campana, S. et al.* (5 authors) 2003, ApJ 594, L39. (1abx) XMM-Newton observations of 5.25 ms pulsar in binary at outburst.
SAX J1808.4-3658	(see V4580 Sgr)
XTE J1810-197 (CXOU J180951.1-194351)	2003, IAU Circ. 8168 (1gx) New pulsating source. 2003, IAU Circ. 8190 (1x) An isolated neutron star?
4U 1812-12	*Barret, D., Olive, J. F., Oosterbroek, T.* 2003, A&A 400, 643. (1x) Simultaneous BeppoSAX and RXTE observations of NS XB.
XTE J1814-338	2003, IAU Circ. 8144 (1x, 3b) New millisecond accreting pulsar. 2003, IAU Circ. 8154 (1ox, 3b) Possible counterpart. 2003, IAU Circ. 8155 (1b) Spectroscopic features.
4U 1820-30	*Šimon, V.* 2003, A&A 405, 199. (1x) Long-term X-ray activity study.
X1822-371	*Casares, J. et al.* (5 authors) 2003, ApJ 590, 1041. (1bo, 2bg) Bowen fluorescence used to analyze companion star.
RX J1826.2-1450	*Reig, P. et al.* (4 authors) 2003, A&A 405, 285. (1x) Long-term X-ray variability study.
PSR B1913+16	*Konacki, M., Wolszczan, A., Stairs, I. H.* 2003, ApJ 589, 495. (5) Method developed to detect geodetic spin precession.
GRS 1915+105	(see V1487 Aql)
AC211/X2127+119	*Torres, M.A.P., Callanan, P.J., Garcia, M.R.* 2003, MNRAS 341, 1231. (1b, 2beg) Time-resolved optical Spectroscopy.

Galactic objects with other designations

B 1620-26	*Sigurdsson, S. et al.* (5 authors) 2003, Science 301, 193. (3b) Pulsar has WD and planet companions.
3C 66B	*Sudou, H. et al.* (4 authors) 2003, Science 300, 1263. (1er, 2bc) Supermassive BH binary.
GSC 3822-1056	(see LP UMa)
GX 3+1	(see Sgr X-1)
GX 5-1	*Bandyopadhyay, R.M., Shahbaz, T., Charles, P.A.* 2003, MNRAS 340, L13. (1abi, 2eg) Spectroscopic identification of the IR counterpart.
GX 13+1	*Schnerr, R.S. et al.* (7 authors) 2003, A&A 406, 221. (1x) Peculiar spectral behaviour.
GX 339-4	(see V821 Ara)
Hodge 53-47	*Morrell, N. et al.* (4 authors) 2003, MNRAS 341, 583. (1ab, 2abc) Photometric and spectroscopic study.
LB 3459	(see AA Dor)

LS I +65 010	(see V662 Cas)
LSS 1135	*Corti, M., Niemela, V., Morrell, N.* 2003, A&A 405, 571. (1b,3b) O-type binary in association.
Nova in Crux	2003, IAU Circ. 8184 (3b) Possible new nova. 2003, IAU Circ. 8185 (1bv) Spectroscopic features. 2003, IAU Circ. 8188 (1aov) Additional magnitudes.
SS 433	(see V1343 Aql)
Var 73 Dra	*Nogami D. et al.* (16 authors) 2003, A&A 404, 1067. (1a) In-the-gap SU UMa-type dwarf nova.
Variable near UGC 10700	2003, IAU Circ. 8153 (1o, 3b) New variable star. 2003, IAU Circ. 8158 (1b) Actually a galactic CV.
WR30a	(see V574 Car)

Extragalactic variables, SN, x-ray sources

LMC X-2	*Smale, A.P., Homan, J., Kuulkers, E.* 2003, ApJ 590, 1035 (1abx) Complete Z diagram.
LMC X-4	*Clarkson, W.I. et al.* (4 authors) 2003, MNRAS 343, 1213. (1x, 2acg) Long-term properties of accretion discs. *Naik, S., Paul, B.* 2003, A&A 401, 265. (1bx) Comparison with Her X-1.
Nova LMC 1995	*Orio, M. et al.* (4 authors) 2003, ApJ 594, 435. (1abx) Observations of bright super soft X-ray source.
LW55 V7	*Kaluzny, J., Rucinski, S.M.* 2003, AJ 126, 237. (1a, 3b) New EB in LMC cluster.
Nova in LMC	2003, IAU Circ. 8160 (1ab, 3b) Possible classical nova.
SMC X-3 (RX J0048.4-7332)	*Kahabka, P.* 2003, Astron. Nachr. 324, Suppl. 2/2003, 88. (1x) ROSAT detection of symbiotic nova in SMC as super-soft X-ray source.
Sk -67°18	*Koenigsberger, G., Moffatt, A.F.J., Auer, L.H.* 2003, Rev. Mex. Astron. Astrofis. 39, 213. (1bu, 2e) Atmosphere and wind study.
Sk -67°104	(see HD 36402)
Novae in M31	2003, IAU Circ. 8155 (1ao) Two possible novae. 2003, IAU Circ. 8157 (1a) Another possible nova. 2003, IAU Circ. 8165 (1ao) Magnitudes of possible novae.
Nova in M33	2003, IAU Circ. 8195 (3b) Possible new nova. 2003, IAU Circ. 8199 (1a) Additional V-magnitudes.
Nova in NGC 6822	2003, IAU Circ. 8141 (3b) Possible new nova. 2003, IAU Circ. 8158 (1b) Actually a red star.
RX J004717.4-251811	*Pietsch, W., Haberl, F., Vogler, A.* 2003, A&A 402, 457. (1bx, 2c) Eclipses in HMXB outside the Local Group.

General

Aarseth, S.J. 2003, Ap&SS 285, 367. Black hole binary dynamics.

Armitage, P.J., Reynolds, C.S. 2003, MNRAS 341, 1041. The variability of accretion onto

Schwarzschild black holes from turbulent magnetized discs.

Barreiro, R.B. et al. (4 authors) 2003, MNRAS 342, 119. Comparing filters for the detection of point sources.

Barker, J., Kolb, U. 2003, MNRAS 340, 623. The minimum period problem in cataclysmic variables.

Bate, M.R. et al. (4 authors) 2003, MNRAS 341, 213. Three-dimensional calculations of high- and low-mass planets embedded in protoplanetary discs.

Belkus, H., Van Bever, J., Vanbeveren, D., van Rensbergen, W. 2003, A&A 400, 429. The effects of binaries on the evolution of UV spectral features in massive starbursts.

Benvenuto, O.G., De Vito, M.A. 2003, MNRAS 342, 50. A code for stellar binary evolution and its application to the formation of helium white dwarfs.

Biermann, P.L. 2003, Astron. Nachr. 324, Suppl. 3/2003, 147. Binary BHs.

Bonanos, A.Z. et al. (6 authors) 2003, AJ 126, 175. Distances to nearby galaxiex using detached EB and Cepheids. IX. Field M31Y using image subtraction.

Bulik, T., Belczynski, K. 2003, ApJ 589, L37. Constraints on the binary evolution from chirp mass measurements.

Burgay, M. et al. (8 authors) 2003, ApJ 589, 902. Search for pulsars in quiescent soft x-ray transients.

Carriere, J., Horowitz, C.J., Piekarewicz, J. 2003, ApJ 593, 463. Low-mass neutron stars and the equation of state of dense matter. (5)

Cash, J.L. 2003, PASP 115, 1156. Modelling accretion streams in polars. (7a)

Cha, S.-H., Whitworth, A.P. 2003, MNRAS 340, 91. The formation and fragmentation of the ring appearing in the collapse of a rotating cloud.

Chakrabarty, D. et al. (7 authors) 2003, Nature 424, 42. Nuclear powered millisecond pulsars and the maximum spin frequency of neutron stars.

Chen, X., Han, Z. 2003, MNRAS 341, 662. Low- and intermediate-mass close binary evolution and the initial-final mass relation - III. Conservative case with convective overshooting and non-conservative case without overshooting.

Claret, A. 2003, A&A 406, 623. Studies on stellar rotation. III. An improvement of the treatment of the brightening distribution of rotating and tidally distorted stars.

Cornelisse, R. et al. (10 authors) 2003, A&A 405, 1033. Six years of BeppoSAX Wide Field Cameras observations of nine galactic type I X-ray bursters.

Delgado-Donate, E.J., Clarke, C.J., Bate, M.R. 2003, MNRAS 342, 926. Accretion and dynamical interactions in small-N star-forming clusters: N = 5.

Dessart, L.L.N., Petrovic, J. 2003, A&A 404, 991. The impact of radiation and wind momenta on mass transfer in massive close binary systems.

Dewi, J.D.M., Pols, O.R. 2003, MNRAS 344, 629. The late stages of evolution of helium star-neutron star binaries and the formation of double neutron star systems.

Djurašević, G. et al. (6 authors) 2003, A&A 402, 667. Gravity-darkening exponents in semi-detached binary systems from their photometric observations: Part I.

Done, C., Gierliński, M. 2003, MNRAS 342, 1041. Observing the effects of the event horizon in black holes.

Dray, L.M., Tout, C.A. 2003, MNRAS 341, 299. Chemical enrichment by Wolf-Rayet stars: non-solar metallicities.

Dreizler, S. et al. (6 authors) 2003, Astron. Nachr. 324, Suppl. 2/2003, 2. Spectral types of planetary host star candidates: new transiting planets?

Dumont, A.M. et al. (6 authors) 2003, A&A 407, 13. Escape probability methods versus "exact" transfer for modelling the X-ray spectrum of Active Galactic Nuclei and X-ray binaries.

Fekel, F.C., Warner, P.B., Kaye, A.B. 2003, AJ 125, 2196. High binary frequency among candidate γ Dor stars.

Fender, R.P. 2003, Ap&SS 288, 79. Circularly polarised radio emission from GRS 1915+105 and other X-ray binaries (see also Individual Stars).

Fender, R.P., Gallo, E., Jonker, P.G. 2003, MNRAS 343, L99. Jet-dominated states: an alternative to advection across black hole event horizons in 'quiescent' X-ray binaries.

Gallo, E., Fender, R.P., Pooley, G.G. 2003, MNRAS 344, 60. A universal radio-X-ray correlation in low/hard state black hole binaries.

García-Sánchez, J., Paredes, J. M., Ribó, M. 2003, A&A 403, 613. VLA multifrequency observations of RS CVn binaries.

Gendre, B., Barret, D., Webb, N. 2003, A&A 403, L11. Discovery of a quiescent neutron star binary in the globular cluster M 13. (1bx)

Giersz, M., Spurzem, R. 2003, MNRAS 343, 781. A stochastic Monte Carlo approach to modelling real star cluster evolution - III. Direct integration of three- and four-body interactions.

Gil-Pons, P. et al. (5 authors) 2003, A&A 407, 1021. The frequency of occurrence of novae hosting an ONe white dwarf.

Goldberg, D., Mazeh, T., Latham, D.W. 2003, ApJ 591, 397. The mass ratio distribution of spectroscopic binaries peaks at 0.2. (6)

Gracia, J. et al. (4 authors) 2003, MNRAS 344, 468. Evolution of bimodal accretion flows.

Greaves, J.S. et al. (16 authors) 2003, MNRAS 340, 353. A submillimetre imaging polarimeter at the James Clerk Maxwell Telescope.

Guenther, E., Hatzes, A., Kürster, M. 2003, Astron. Nachr. 324, Suppl. 2/2003, 1. The Tautenburg RV survey for extrasolar planets.

Günther, R., Schäfer, C. 2003, Astron. Nachr. 324, Suppl. 3/2003, 41. Circumbinary disk evolution.

Gurzadyan, G.A. 2003, Ap&SS 286, 515. On the 2800 MgII Radiation field in binary star envelopes.

Hammer, N., Nagel, T., Werner, K. 2003, Astron. Nachr. 324, Suppl. 3/2003, 142. A new class of ultracompact binary systems.

Han, Z. et al. (4 authors) 2003, MNRAS 341, 669. The origin of subdwarf B stars - II.

Heinz, S., Sunyaev, R.A. 2003, MNRAS 343, L59. The non-linear dependence of flux on black hole mass and accretion rate in core-dominated jets.

Holzwarth, V., Schüssler, M. 2003, A&A 405, 291. Dynamics of magnetic flux tubes in close binary stars. I. Equilibrium and stability properties.

Holzwarth, V., Schüssler, M. 2003, A&A 405, 303. Dynamics of magnetic flux tubes in close binary stars. II. Nonlinear evolution and surface distributions.

Irwin, J.A., Athey, A.E., Bregman, J.N. 2003, ApJ 587, 356. X-ray spectral propeties in LMXB's in nearby galaxies.

Ivanova, N. et al. (5 authors) 2003, ApJ 592, 475. The role of helium stars in the formation of double neutron stars. (5)

Izzard, R.G., Tout, C.A. 2003, Publ. Astron. Soc. Australia 20, 345. Nucleosynthesis in binary populations.

Jin, H. et al. (7 authors) 2003, A&A 404, 621. Multiband photometric re-classification of ROTSE-I δ Scuti-type stars.

Jose, J. et al. (4 authors) 2003, Publ. Astron. Soc. Australia 20, 351. Constraining models of classical nova outbursts with the Murchison meteorite.

Kafka, S., Honeycutt, R.K. 2003, AJ 126, 276. New variables in NDG 188 may include low-luminosity W UMas.

Kaluzny, J., Thompson, I.B. 2003, AJ 125, 2534. Photometry of CBs and variables in NGC 6397.

Kim, S.-L. et al. (6 authors) 2003, A&A 405, 231. Search for A-F spectral-type pulsating components in Algol-type eclipsing binary systems.

King, A.R., Rolfe, D.J., Schenker, K. 2003, MNRAS 341, L35. A new evolutionary channel for type Ia supernovae.

Köhler, R. 2003, Astron. Nachr. 324, Suppl. 3/2003, 40. Multiplicity of T Tauri stars.

Körding, E., Falcke, H. 2003, Astron. Nachr. 324, Suppl. 2/2003, 23. Time lags of BH candidates.

Kraus, U., Zahn, C., Weth, C., Ruder, H. 2003, ApJ 590, 424. Application of column model to medium-luminosity XRB pulsars.

Kube, J. et al. (4 authors) 2003, A&A 404, 1159. CVcat: An interactive database on cataclysmic variables.

Liffman, K. 2003, Publ. Astron. Soc. Australia 20, 337. The gravitational radius of an irradiated disk.

Malkov, O. Yu. 2003, A&A 402, 1055. Eclipsing binaries and the mass-luminosity relation.

Manset, N., Bastien, P. 2003, AJ 125, 3274. Polarimetry of pre-main-sequence SBs.

Mason, E., Howell, S.B. 2003, A&A 403, 699. Spectroscopic observations of twenty-one faint cataclysmic variable candidates.

Merloni, A. 2003, MNRAS 341, 1051. Beyond the standard accretion disc model: coupled magnetic disc-corona solutions with a physically motivated viscosity law.

Merloni, A., Fabian, A.C. 2003, MNRAS 342, 951. Iron Kα line profiles and the inner boundary condition of accretion flows.

Mochejska, B.J., Stanek, K.Z., Kaluzny, J. 2003, AJ 125, 3175. Long-term variability survey of NGC 6791; new binaries, improved periods for others.

Mukhopadhyay, B., Ghosh, S. 2003, MNRAS 342, 274. Global solution for a viscous accretion disc around a rotating compact object: pseudo-general-relativistic study.

Nakamura, F., Li, Z.-Y. 2003, ApJ 594, 363. Binary and multiple star formation in magnetic clouds: bar growth and fragmentation. (5)

Narayan, R., Medvedev, M.V. 2003, MNRAS 343, 1007. Self-similar hot accretion on to a spinning neutron star: matching the outer boundary conditions.

Niarchos, P.G., Manimanis, V.N. 2003, A&A 405, 263. On the performance of GAIA on photometry of eclipsing binaries: The case of four near-contact and contact systems.

Nielbock, M., Chini, R., Müller, S.A.H. 2003, Astron. Nachr. 324, Suppl. 3/2003, 37. The stellar content of OMC2 and 3.

North, P., Zahn, J.-P. 2003, A&A 405, 677. Circularization in B-type eclipsing binaries in the Magellanic Clouds.

O'Dwyer, I.J. et al. (5 authors) 2003, AJ 125, 2239. WDs showing hard x-ray emission are mostly binaries.

Oka, K., Manmoto, T. 2003, MNRAS 340, 543. γ-ray emission from an accretion flow around a Kerr black hole.

Orihara, S., Fukue, J. 2003, PASJ 55, 953. Radiative collimation of electron-positron jets II.

Osaki, Y., Meyer, F. 2003, A&A 401, 325. Is evidence for enhanced mass transfer during dwarf-nova outbursts well substantiated?

Podsiadlowski, Ph., Han, Z., Rappaport, S. 2003, MNRAS 340, 1214. Cataclysmic variables with evolved secondaries and the progenitors of AM CVn stars.

Podsiadlowski, Ph., Rappaport, S., Han, Z. 2003, MNRAS 341, 385. On the formation and evolution of black hole binaries.

Pooley, D. et al. (15 authors) 2003, ApJ 591, L131. Dynamical formation of close binary systems in globular clusters. (1ax)

Preibisch, T., Balega, Y.Y., Schertl, T., Weigelt, G. 2003, Astron. Nachr. 324, Suppl. 3/2003, 41. The massive multiple stars in the Orion Trapezium: orbital motion, physical properties, and implications on star formation scenarios.

Raguzova, N.V. 2003, AZh 80, 436. Population synthesis of rapidly rotating main-sequence stars with companions.

Ransom, S.M., Cordes, J.M., Eikenberry, S.S. 2003, ApJ 589, 911. Sideband searching, a new technique to detect short period binary pulsars.

Ratzka, T., Köhler, R., Leinert, C. 2003, Astron. Nachr. 324, Suppl. 3/2003, 42. A multiplicity survey of the ρ Oph dark cloud.

Ray, A.K. 2003, MNRAS 344, 83. Linearized perturbation on stationary inflow solutions in an inviscid and thin accretion disc.

Raymond, S.N. et al. (10 authors) 2003, AJ 125, 2621. First look at 109 WD – dM pairs in SDSS.

Reyniers, K., Smeyers, P. 2003, A&A 404, 1051. Tidal perturbations of linear, isentropic oscillations in components of circular-orbit close binaries. I. Synchronously rotating components.

Rice, W.K.M. et al. (5 authors) 2003, MNRAS 342, 79. Constraints on a planetary origin for the gap in the protoplanetary disc of GM Aurigae.

Ritter, H., Kolb, U. 2003, A&A 404, 301. Catalogue of cataclysmic binaries, low-mass X-ray binaries and related objects (seventh edition).

Roberts, T.P., Colbert, E.J.M. 2003, MNRAS 341, L49. *Chandra* reveals a black hole X-ray binary within the ultraluminous supernova remnant MF 16.

Sandquist, E.L., Shetrone, M.D. 2003, AJ 125, 2173. Photometry of W UMas, blue stragglers and related objects in M67.

Sano, T., Stone, J.M. 2003, ApJ 586, 1297. Evolution of magnetorotational instability in dwarf nova disks.

Sasaki, M., Pietsch, W., Haberl, F. 2003, A&A 403, 901. XMM-Newton observations of High Mass X-ray Binaries in the SMC.

Sato, J., Sawada, K., Ohnishi, N. 2003, MNRAS 342, 593. Two-dimensional hydrodynamic simulation of an accretion flow with radiative cooling in a close binary system.

Schreiber, M.R., Gänsicke, B.T. 2003, A&A 406, 305. The age, life expectancy, and space density of post-common-envelope binaries.

Shi, W.-B. et al. (5 authors) 2003, Chinese Astrron. Ap. 27, 292. Monte Carlo simulations of the orbital elements and abundances of barium stars.

Šimon, V. 2003, A&A 406, 613. Luminous binary supersoft X-ray sources: Optical colours and absolute magnitudes.

Soker, N., Harpaz, A. 2003, MNRAS 343, 456. Criticism of recent calculations of common envelope ejection.

Stark, M.A., Wade, R.A. 2003, AJ 126, 1455. Photometry of single and composite hot subdwarfs from 2MASS.

Steeghs, D. 2003, MNRAS 344, 448. Extending emission-line Doppler tomography: mapping modulated line flux.

Sterzik, M. F., Durisen, R. H. 2003, A&A 400, 1031. Imprints of dynamical interactions on brown dwarf pairing statistics and kinematics.

Street, R.A. et al. (10 authors) 2003, MNRAS 340, 1287. Searching for planetary transits in the field of open cluster NGC 6819-I.

Szkody, P. et al. (21 authors) 2003, AJ 126, 1499. Second year's results on CVs from SDSS.

Taam, R.E., Sandquist, E.L., Dubus, G. 2003, ApJ 592, 1124. CV evolution with circumbinary disks. (5)

Taylor, S.F., Harvin, J.A., McAlister, H.A. 2003, PASP 115, 609. CHARA catalogue of orbital elements of SBs.

Tian, L.-L., Zhou, J.-L. 2003, Chinese Astrron. Ap. 27, 209. Numerical analysis of a class of planar three-body systems with nonzero angular momentums.

Tokovinin, A., Baumont, S., Vasquez, J. 2003, MNRAS 340, 52. Statistics of turbulence profile at Cerro Tololo.

Tutukov, A.V., Cherepashchuk, A.M. 2003, AZh 80, 419. Wolf-Rayet stars and black holes in close binaries.

Van Bever, J., Vanbeveren, D. 2003, A&A 400, 63. The effects of binaries on the evolution of Wolf-Rayet type spectral features in starbursts.

Voss, R., Tauris, T.M. 2003, MNRAS 342, 1169. Galactic distribution of merging neutron stars and black holes - prospects for short γ-ray burst progenitors and LIGO/VIRGO.

Wang, D-X., Lei, W-H., Ma, R-Y. 2003, MNRAS 342, 851. Transfer of energy and angular momentum in the magnetic coupling between a rotating black hole and the surrounding accretion disc.

Wang, D-X. et al. (4 authors) 2003, MNRAS 344, 473. An analytic model of a rotating hotspot and kilohertz quasi-periodic oscillations in X-ray binaries.

Watarai, K., Mineshige, S. 2003, PASJ 55, 959. Where is a marginally stable last orbit in super-critical accretion flow?

Wijnands, R., et al. (6 authors) 2003, Nature 424, 44. Quasi-periodic X-ray brightness fluctuations in an accreting millisecond pulsar.

Willems, B., Kolb, U. 2003, MNRAS 343, 949. On the detection of pre-low-mass X-ray binaries.

Wyithe, J.S.B., Loeb, A. 2003, ApJ 590, 691. Low-frequency gravitational waves from massive black hole binaries. (5)

Zanotti, O., Rezzolla, L., Font, J.A. 2003, MNRAS 341, 832. Quasi-periodic accretion and gravitational waves from oscillating 'toroidal neutron stars' around a Schwarzschild black hole.

Zdziarski, A.A. et al. (4 authors) 2003, MNRAS 342, 355. Correlations between X-ray and radio spectral properties of accreting black holes.

Zucker, S. 2003, MNRAS 342, 1291. Cross-correlation and maximum-likelihood analysis: a new approach to combining cross-correlation functions.

Życki, P.T. 2003, MNRAS 340, 639. Simulations of X-ray spectra/timing properties in a propagation model of variability of accreting black holes.

Collections of data

Bakis, V. et al. (13 authors) 2003, IBVS 5399. (1af, 2c) New times of minima of EB systems: RT And, WZ And, TT Aur, IU Aur, TY Boo, UW Boo, CK Boo, RZ Cas, DK Cep, EG Cep, SW Cyg, V859 Cyg, AX Dra, UX Eri, RX Gem, AP Leo, PY Lyr, ER Ori, BN Peg, II Per, V432 Per, XY Sct, AH Tau, XY UMa and RU UMi.

Bernasconi, L., Behrend, R. 2003, IBVS 5411. (1af, 2c, 3b) Five new W UMa EBs: GSC 229-701, GSC 825-1465, GSC 2511-53, GSC 6336-140, TYC 2511-167-1.

Blättler, E., Diethelm, R. 2003, IBVS 5403. (1af, 2c) CCD light curves of ROTSE1 variables in CVn: GSC 2534-216, GSC 2536-122, GSC 2548-936, GSC 3022-996 and VV CVn.

Borkovits, T. et al. (11 authors) 2003, IBVS 5434. (1af) New times of minima of EB systems: XZ And, AB And, SS Ari, HP Aur, IM Aur, IU Aur, VW Cep, V477 Cyg, AK Her, GU Her, V861 Her, SW Lac, UV Leo, UZ Leo, V404 Lyr, AG Per, XY UMa, DW UMa, LP UMa.

Carquillat, J.-M., Prieur, J.-L., Ginestet, N. 2003, MNRAS 342, 1271. (1b, 2ab) Spectroscopic orbital elements of ten binaries: HD 8226, HD 32835, HD 45044, HD 55549, HD 55684, HD 59076, HD 60966, HD 181731, HD 223932, HD 265334.

Choudhury, M. et al. (4 authors) 2003, ApJ 593, 452. (1arx) Correlated observations of hard states of galactic microquasars V1487 Aql (GRS 1915+105), V1357 Cyg (Cyg X-1), V1521 Cyg (Cyg X-3).

Clausen, J.V., Storm, J., Larsen, S.S., Giménez, A. 2003, A&A 402, 509. (1ao, 2ac) Eclipsing binaries in the Magellanic Clouds: *ubvy* CCD light curves and photometric analyses for HV 982 (LMC), HV 12578 (LMC), HV 1433 (SMC), and HV 11284 (SMC).

Derman, E., Kalci, R. 2003, IBVS 5439. (1af) Photoelectric minimum times of some EB stars: AB And, CG Cyg, V1073 Cyg, VW LMi, CC Lyn, AQ Psc, V1123 Tau.

Diethelm, R. 2003, IBVS 5438. (1af) 162-nd list of minima timings of EB by BBSAG observers: 508 timings of EB secured by photoelectric and by visual means by BBSAG observers, obtained between Sep 2002 and June 2003.

Farinelli, R. et al. (11 authors) 2003, A&A 402, 1021. (1bx, 2g) BeppoSAX observations of two unclassified LMXBs: X1543-624 and X1556-605.

Freire, P.C. et al. (7 authors) 2003, MNRAS 340, 1359. (1er, 2abc) Results for timing observations of the millisecond pulsars: PSR J0024-7204S, PSR J0024-7204H, PSR J0023-7203J, PSR J0024-7204O.

Gänsicke, B.T. et al. (9 authors) 2003, ApJ 594, 443. (1bu) Anomalous line flux ratios in CVs EY Cyg, BZ UMa, 1RXS J232953.9+062814, CE 315.

Gonzalez-Rojas, D.J. et al. (6 authors) 2003, IBVS 5437. (1af, 2c, 3b) Two new EB systems: GSC 0619-0232, GSC 3658-0076.

Graczyk, D. 2003, MNRAS 342, 1334. (1a, 2abc) Physical parameters of 19 detached binaries: SC3 139 376, SC4 53 898, SC4 103 706, SC4 163 552, SC4 192 903, SC5 38 089, SC5 129 441, SC5 311 566, SC6 11 143, SC6 67 221, SC6 215 965, SC6 221 543, SC6 272 453, SC6 319 966, SC8 104 222, SC8 201 484, SC9 163 575, SC9 175 336, SC10 37 223.

Griffin, R.F., Suchkov, A.A. 2003, ApJS 147, 103. (1b, 2ac, 3b) Observations of 118 over-luminous F-type stars allow the discovery of 25 new spectroscopic binaries.

Gurol, B. et al. (7 authors) 2003, IBVS 5442. (1af) BX And, CN And, OO Aql, 44 Boo, VW Boo, V523 Cas, UV Leo, AM Leo, V839 Oph, HW Vir.

Humphrey, P.J. et al. (5 authors) 2003, MNRAS 344, 134. (1x, 2e, 6) A survey of ultraluminous X-ray sources in normal galaxies. 61 sources were detected.

Kato, T. et al. (4 authors) 2003, PASJ 55, 989. (1a, 6) Superhumps of HO Del and a statistical study of SU UMa-type dwarf novae.

Maciejewski, G. et al. (4 authors) 2003, IBVS 5431. (1af, 2a, 3b) Four new short-period EB stars: HD 65498, HD 67894, BD+20 2890, GSC 03472-00641.

Richards, M.T. et al. (4 authors) 2003, ApJS 147, 337. (1ar) Five-year continuous monitoring reveals flare periodicity and flare-phase relationship in UX Ari, δ Lib, β Per, and V711 Tau.

Rinner, C. et al. (6 authors) 2003, IBVS 5428. (1a, 2c, 3b) Eight new W UMa variables: GSC 661-503, GSC 843-262, GSC 1400-455, GSC 1402-52, GSC 1402-121, GSC 2495-1124, GSC 4948-989, USNO-A2.0 1050-19244897.

Rucinski, S. et al. (10 authors) 2003 AJ 125, 3258. (1b, 2a) RV and orbital elements for SB2s: V410 Aur, V523 Cas, QW Gem, V921 Her, V2357 Oph, V1130 Tau, HN UMa, HX UMa, HD 93917, NCV 223.

Sanz-Forcada, J., Brickhouse, N.S., Dupree, A.K. 2003, ApJS 145, 147. (1bcu, 2e) Structure of stellar coronae in active binary stars: V824 Ara, VY Ari, FK Aqr, AY Cet, BH CVn, σ^2 CrB, BY Dra, CC Eri, YY Gem, AR Lac, DH Leo, BF Lyn, V478 Lyr, AR Psc, ξ UMa B, ER Vul.

Tanriverdi, T. et al. (18 authors) 2003, IBVS 5407. (1af) Photoelectric minima of some EBs: V376 And, HV Aqr, SV Cam, V776 Cas, CG Cyg, SW Lac, ET Leo, DI Peg, V357 Peg, V781 Tau.

Vante Putte, D. et al. (4 authors) 2003, MNRAS 342, 151. (1b, 2abc) A spectroscopic search for faint secondaries in CVs: UU Aqr, SY Cnc, EF Eri, EX Hya, VV Pup, LX Ser, RW Sex, SW Sex, RW Tri, UX UMa.

Wichmann, R., Schmitt, J.H.M.M., Hubrig, S. 2003, A&A 400, 293. (1b, 2a, 3b) New spectroscopic binaries among nearby stars: HD 24, HD 10800, HD 12695, HD 18198, HD 40705, HD 44135, HD 89441, HD 89959, HD 110143, HD 120368, HD 143705, HD 195521, HD 202996. Includes orbital solutions for HD 89959 and HD 143705.

Wils, P., Dvorak, S.W. 2003, IBVS 5425. (1a, 2c, 3b) EBs discovered on stardial images: HD 51697, HD 67093, HD 89027, HD 162905, HD 296761, BD -0°2900, BD -2°2221, BD -3°3419, BD -4°2739, GSC 04904-01087.

Woudt, P.A., Warner, B. 2003, MNRAS 340, 1011. (1a, 2ac) High-speed photometry of faint CVs: V842 Cen, BY Cir, DD Cir, V655 CrA, TV Crv, CP Cru, V794 Oph, V992 Sco, EU Sct, V373 Sct.

Zezas, A., Ward, M.J., Murray, S.S. 2003, ApJ 594, L31. (1ax) Discrete X-ray sources in X-ray luminous galaxy merger may include X-ray binaries.

Proceedings of Conferences, Symposia, and Monographs

Stellar Variability *Proust, D., Verdenet, M., Minois, J.* (eds.) 2003, Proc. of the A.F.O.E.V. international conference on variable stars held at Bourbon-Lancy, France, 2002 August 26-28. 7 papers on CB: QT And, UU Aqr, i Boo, GY Cnc, V1504 Cyg, HZ Her.

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