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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

a. CCD b. Photoelectric c. Photographic d. Visual

2. Spectroscopic data

a. Radial velocities b. Spectral classification c. Line identification d. Spectrophotometry

3. Polarimetry

a. Broad-band b. Spectropolarimetry

4. Astrometry

a. Positions and proper motions b. Relative positions only c. Interferometry

5. Derived results

a. Times of minima
b. New or improved ephemeris, period variations
c. Parameters derivable from light curves
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
c. Identification of optical counterparts of 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

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

Several entries of this issue use the abbreviation:

OAP — Odessa Astronomical Publications (issue of the Odessa Astronomical Observatory of the Odessa State University, Ukraine), Astroprint Publishing Company, Ukraine

Individual Stars

Z And	*Ikeda, Y. et al.* (8 authors) 2004, ApJ 604, 357. (1bdo) Polarization of Hα wings.
LL And	2004, IAU Circ. 8345. (1ad) Outburst of CV.
QR And	*Schwarz, R., Reinsch, K.* 2004, Astron. Nachr. 325 Suppl. 1/2004, 107. (1x, 2dx) Supersoft x-ray source.
QU And (HD 7205)	*Fekel, F.C.* 2004, AJ 127, 2931. (2ao, 5d) Chromospherically active system.
AE Aqr	*Ikhsanov, N.R., Neustroev, V.V., Beskrovnaya, N.G.* 2004, A&A 421, 1131. (5i)
EL Aqr	*Wadhwa, S.S., Zealey, W.J.* 2004, Ap&SS 291, 21. (5ce)
HU Aqr	*Somov, N.N. et al.* (5 authors) 2003, OAP 16, 73. (2c, 6c) Unstable processes in eclipsing polar.
V603 Aql	*Baklanov, A.V., Antonyuk, O.I., Pavlenko, E.P.* 2003, OAP 16, 15.(1a, 5b) Nova-like variable V603 Aquilae in 1999. *Suleimanov, V.F. et al.* (8 authors) 2003, OAP 16, 81. (1b, 5c) Disk precession of in 2001-2002.
V802 Aql	*Samec, R.G., Martin, M., Faulkner, D.R.* 2004, IBVS 5527. (1a, 5a, 6d) Dwarf AW UMa-type binary system.
V871 Aql	*Wolf, M. et al.* (9 authors) 2004, A&A 420, 619. (1ao, 5af)
V1333 Aql (Aql X-1)	*Maitra, D, Bailyn, C.D.* 2004, ApJ 608, 444. (1bx) Evolution of spectral states during 2000 outburst.
V1405 Aql (XB 1916−053)	*Boirin, L. et al.* (5 authors) 2004, A&A 418, 1061. (2dxc) LMXB
V1487 Aql (GRS 1915+105)	*Done, C., Wardziński, G., Gierliński, M.,* 2004, MNRAS 349, 393. (1bx, 5dgi, 8a) Comparison with "normal" black holes. *Fender, R., Belloni, T.* 2004, ARA&A 42, 317. (1ior, 2dx, 5i) Review of BH binary and discussion of disk-jet coupling in relativistic jet source. *Misra, R. et al.* (5 authors) 2004, ApJ 609, 313. (1x*, 9) Chaotic behaviour in black-hole system. *Tagger, M. et al.* (4 authors) 2004, ApJ 607, 410. (2g) Magnetic flood scenario for variability.
V1493 Aql (Nova 1999)	*Venturini, C.C. et al.* (4 authors) 2004, AJ 128, 405. (2edi) Nova with unusual spectrum.
V1494 Aql	*Hachisu, I., Kato, M., Kato, T.* 2004, ApJ 606, L139. (2g) Model of two-armed spiral shocks in AD. *Kiss, L.L., Csák, B., Derekas, A.* 2004, A&A 416, 319. (1ao, 6c) Eclipsing nova.
V1548 Aql	*Primak, N., Pavlenko, E.P.* 2003, OAP 16, 55. (1a, 6c) Extremely snow nova.
FO Aqr	*Evans, P.A. et al.* (4 authors) 2004, MNRAS 349, 715. (1aux, 5cdgi) Twisted accretion curtains.
IO Aqr	*Dimitrov, W., Kolev, D., Schwarzenberg-Czerny, A.* 2004, A&A 417, 689. (1bo, 2ao, 5cde)
V821 Ara (GX 339-4)	*Hynes, R.I. et al.* (5 authors) 2004, ApJ 609, 313. (1x*, 9) Clues to the distance of black-hole binary candidate. *Miller, J.M. et al.* (12 authors) 2004, ApJ 606, L131. (1bx) Evidence of BH spin.

	Zdziarski, A.A. et al. (7 authors) 2004, MNRAS 351, 791. (1gx, 5gi, 8a) Distance and study of x-ray variability.
XY Ari	*Salinas, A., Schlegel, E.M.* 2004, AJ 128, 1331. (1x, 2cdx) Chandra observations.
V405 Aur	*Evans, P.A., Hellier, C.* 2004, MNRAS 353, 447. (1x, 5gi) Modelling the soft and x-ray emission.
V432 Aur	*Siviero, A. et al.* (7 authors) 2004, A&A 417, 1083. (1bo, 2ao, 5cde)
TT Boo	*Olech, A. et al.* (7 authors) 2004, Acta Astronomica 54, 233. (1a, 5b) Superhump period change.
CV Boo	*Nelson, R.H.* 2004, IBVS 5535. (1a, 2a, 5cd) Detached solar-type binary.
EF Boo	*Özdemir, S. et al.* (4 authors) 2004, Astron. Nachr. 325, 332. (5cde) LC and RV curve solution of W-type W UMa system.
SV Cam	*Patkós, L., Csizmadia, S.* 2004, Astron. Nachr. 325, 424. (1bo, 5c) LC analysis of EB with spots.
AY Cam	*Williamon, R.M., Sowell, J.R., Van Hamme, W.* 2004, AJ 128, 1319. (1bo, 2ao*, 5cde)
YZ Cnc	*Hakala, P. et al.* (5 authors) 2004, A&A 420, 273. (1x,5j)
AT Cnc	*Kozhevnikov, V.P.* 2004, A&A 419, 1035. (1bo) Superhumps in dwarf nova.
DW Cnc	*Patterson, J. et al.* (10 authors) 2004, PASP 116, 516. (1bo, 2ad) Rapid oscillation periods elucidated. *Rodríguez-Gil, P. et al.* (4 authors) 2004, MNRAS 349, 367. (1ao, 2acd, 5bdegi) Photometric and spectroscopic study.
CR CMa	*Samec, Ronald G. et al.* (5 authors) 2004, IBVS 5520. (1a, 5abc, 6d) New solar-type near contact binary.
CX CMa	*Nelson, R.H., Terrell, D.* 2004, IBVS 5545. (1a, 5abc) Early-type detached EB.
EM Car	*Pfeiffer, R.J., Stickland, D.J.* 2004, Observatory 124, 117. (5gj) New model fits light curves and wind-line profiles.
OY Car	*Hakala, P., Ramsay, G.* 2004, A&A 416, 1047. (2dx*, 1bou*, 5cdi)
AB Cas	*Rodríguez, E. et al.* (8 authors) 2004, MNRAS 353, 310. (1bo, 5abcg) The primary component is a δ Sct-type pulsator.
IR Cas	*Zhu, Li.-Y., Qian, S.-B., Xiang, F.-Y.* 2004, PASJ 56, 809. (1bo, 5ab) Period variation.
V459 Cas	*Lacy, C.H.S., Claret, A., Sabby, J.A.* 2004, AJ 128, 1340. (1bo, 2ao, 5abcde)
V685 Cen	*Mayer, P., Pribulla, T., Chochol, D.* 2004, IBVS 5563. (1a, 5c) Variable depths of minima.
VV Cep	*Pollmann, E.* 2004, Astron. Nachr. 325 Suppl. 1/2004, 92. (2d) Temporal behaviour of Hα equivalent width during 1997/98 eclipse.
CQ Cep	*Kartasheva, T.A. et al.* (4 authors) 1998, Bull. Special Astroph. Obs. 46, 50. (3a, 6c) Polarimetric study of WR EB. *Kartasheva, T.A., Svechnikov, M.A.* 2000, Bull. Special Astroph. Obs. 49, 101. (2a, 6d) Close WR binary system plus third body.
CW Cep	*Erdem, A. et al.* (8 authors) 2004, Astron. Nachr. 325, 336. (1ao, 5cf).
CX Cep	*Kartasheva, T.A.* 2002, Bull. Special Astroph. Obs. 53, 18. (2a, 6c) Attempt to refine component masses of WR EB.

	Kartasheva, T.A. 2002, Bull. Special Astroph. Obs. 54, 56. (3a) Polarimetric study of very close WR EB.
EK Cep	*Marques, J.P., Fernandes, J., Monteiro, M.J.P.F.G.* 2004, A&A 422, 239. (8ac)
VW Cet	*Lloyd, C., West, D.* 2004, IBVS 5529. (1a) No periodic variation above 0.01-0.02 mag.
GP Com	*Strohmayer, T.E.* 2004, ApJ 608, L53. (1bx) Nitrogen and neon lines detected, other elements inferred.
T CrB	*Zamanov, R. et al.* (4 authors) 2004, MNRAS 350, 1477. (1bou, 5cg) Flickering variability.
UW CrB (MS 1603.6+2600)	*Hynes, R.I., Robinson, E.I., Jeffrey, E.* 2004, ApJ 608, L101. (1ao) Discovery of optical bursts of x-ray binary.
W Crv	*Odell, A.P., Cushing, G.E.* 2004, IBVS 5514. (1a, 5ab, 6d) Changes in period and LC.
59 Cyg	*Maintz, M. et al.* (5 authors) 2004, Astron. Nachr. 325 Suppl. 1/2004, 18. (2ao) Be+sdO binary.
SS Cyg	*Mauche, C.W.* 2004, ApJ 610, 422. (1x, 2x) Low-energy x-ray spectrum of outburst.
CG Cyg	*Afşar, M., Heckert, P.A., Ibanoğlu, C.* 2004, A&A 420, 595. (1ao, 5bc)
KR Cyg	*Sipahi, E., Gülmen, Ö.* 2004, Ap&SS 293, 307. (1b, 5bc)
V404 Cyg	*Hynes, R.I. et al.* (14 authors) 2004, ApJ 611, 125. (1xo, 2do) Correlated observations in quiescence. *Zurita, C. et al.* (6 authors) 2004, MNRAS 352, 877. (1aoi, 5bcg) Long-term optical/infrared variability.
V453 Cyg	*Southworth, J., Maxted, P.F.L., Smalley, B.* 2004, MNRAS 351, 1277. (1bo*, 2ac, 5cdefg, 8c) Photometric and spectroscopic study.
V469 Cyg	*Caton, D.B.* 2004, IBVS 5531. (1a, 5ab) Discovery of δ Sct star.
V885 Cyg	*Lacy, C.H.S. et al.* (4 authors) 2004, AJ 128, 1324. (1bo, 2ao, 5cde)
V1341 Cyg (Cyg X-2)	*O'Brien, K. et al.* (5 authors) 2004, MNRAS 350, 587. (1bx, 2d, 5g) X-ray and high-speed spectroscopic observations.
V1357 Cyg (Cyg X-1)	*Karitskaya, E.A. et al.* (6 authors) 2003, OAP 16, 33. (2c, 6j) Optical high-resolution spectroscopy as a method of investigating x-ray binary. *Liu, C.Z., Li, T.P.* 2004, ApJ 611, 1084. (2x) X-ray spectral variability.
V1500 Cyg	*Pavlenko, E.P.* 2003, OAP 16, 41.(1b, 6c) Magnetic asynchronous nova in an "Early" and a "Middle" post-nova state.
V1504 Cyg	*Antonyuk, O.I.* 2003, OAP 16, 14. (1b) Superoutburst of V1504 Cygni in 2003.
V1521 Cyg (Cyg X-3)	*Choudhury, M. et al.* (5 authors) 2004, A&A 420, 665. (1x, 5c)
V1974 Cyg	*Cassatella, A. et al.* (5 authors) 2004, A&A 420, 571. (5cd)
V2275 Cyg	*Garnavich, P.M. et al.* (7 authors) 2004, IBVS 5519. (1a, 6d) Rapid variations in Nova Cyg 2000. *Ostrova, N.I., Shugarov, S.Yu., Andronov, I.L.* 2003, OAP 16, 37. (1a, 6a) CCD photometry of CV in 2003.
FZ Del	*Hanna, M.A., Awadalla, N.S.* 2004, Ap&SS 291, 85. (1b, 5bc)
AA Dor	*Rauch, T.* 2004, Ap&SS 291, 275. (2c, 5dg)

AG Dra	*Ikeda, Y. et al.* (8 authors) 2004, ApJ 604, 357. (1bdo) Polarization profile of Hα due to Raman scattering of Lyman β.
AI Dra	*Lázaro, C., Martínez-Pais, I.G., Arévalo, M.J.* 2004, MNRAS 351, 707. (1aibo*, 2ab, 5abcdeg) Revised fundamental parameters.
AS Eri	*Mkrtichian, D.E. et al.* (11 authors) 2004, A&A 419, 1015. (1b) Pulsations in Algol-type system.
WX Eri	*Arentoft, T. et al.* (6 authors) 2004, A&A 418, 249. (1ao, 6ac) No δ Scuti-type pulsations found.
OW Gem (HDE 258878)	*Griffin, R.F.* 2004, Observatory 124, 136. (5cd) Accuracy of eccentricity determination.
V369 Gem	*Barway, S., Pandey, S.K.* 2004, IBVS 5553. (1b, 5b) New BVRI photometry.
CT Her	*Kim, S.L. et al.* (9 authors) 2004, IBVS 5537. (1a, 6d) Short-period pulsating component.
EF Her	*Kim, S.L. et al.* (9 authors) 2004, IBVS 5537. (1a, 6d) Short-period pulsating component.
HZ Her (Her X-1)	*Still, M., Boyd, P.* 2004, ApJ 606, L135. (2g) Change in precession period consistent with radiation-driven warping. *Zane, S. et al.* (5 authors) 2004 MNRAS 350, 506. (1aux, 5bgi) *XMM-Newton* EPIC and Optical Monitor observations.
V446 Her	*Pavlenko, E.P. et al.* (5 authors) 2003, OAP 16, 48. (1b, 6c) Multicolour photometry of classical nova in quiescence.
V861 Her	*Csizmadia, Sz. et al.* (4 authors) 2004, A&A 417, 745. (1bo, 6c)
SS Hya	*Lloyd, C., West, D.* 2004, IBVS 5529. (1a) No periodic variation above 0.01-0.02 mag.
EX Hya	*Hoogerwerf, R., Brickhouse, N.S., Mauche, C.W.* 2004, ApJ 610, 411. (1x, 2x, 5d) X-ray RV curves enable mass determination of WD (0.49 solar).
EZ Hya	*Yang, Y.-G., Qian, S.-B., Zhu, C.-H.* 2004, PASP 116, 826. (1ao, 5bcde) Simultaneous solution of new photometry and published radial velocities.
VW Hyi	*Godon, P. et al.* (6 authors) 2004, ApJ 612, 429. (2u) Dwarf nova in quiescence.
SU Ind	*Budding, E. et al.* (4 authors) 2004, Astron. Nachr. 325, 433. (1abo, 5c) LC analysis of evolved F-type EB with rapidly rotating components.
BS Ind	*Guenther, E.W. et al.* (4 authors) 2004, Astron. Nachr. 325 Suppl. 1/2004, 7. (1ao, 2a, 5cde)
V345 Lac	*Wolf, M. et al.* (9 authors) 2004, A&A 420, 619.(1ao, 5af)
V401 Lac	*Wolf, M. et al.* (9 authors) 2004, A&A 420, 619.(1ao, 5af)
SW Lac	*Albayrak, B. et al.* (4 authors) 2004, A&A 420, 1039. (1bo, 5bc)
93 Leo	*Griffin, R.E.M., Griffin, R.F.* 2004, MNRAS 350, 685. (2ab, 5deg, 8c) Spectroscopic study.
T Leo	*Vrielmann, S., Ness, J.-U., Schmitt, J.H.M.M.* 2004, A&A 419, 673. (2dx) Intermediate polar?
AM Leo	*Miller, M.E., Osborn, W., Terrell, D.* 2004, PASP 116, 337. (1ao, 2abc)
CE Leo	*Kang, Y.W. et al.* (5 authors) 2004, AJ 128, 846. (1aoi, 5abcg) Chromospherically active EB.

UZ Lib	*Zboril, M., Strassmeier, K.G., Avrett, E.H.* 2004, A&A 421, 295. (2c, 5gh)
GW Lib	*van Zyl, L. et al.* (14 authors) 2004, MNRAS 350, 307. (1ao, 5bg) Non-radial pulsation modes.
MV Lyr	*Hoard, D.W. et al.* (7 authors) 2004, ApJ 604, 346. (1abou) Temperatures of stars, distance to system.
V524 Mon	*Samec, R., Loflin, T.* 2004, Observatory 124, 284. (1aoi, 2abc)
V694 Mon (MWC 560)	*Hillwig, T., Livio, M., Honeycutt, R.K.* 2004, PASP 116, 397. (2ado) New evidence for collimated jet.
V714 Mon	*Qian, S.-B., et al.* (5 authors) 2004, PASJ 56, 465. (1ao, 5ab) Period variation.
HH Nor	*Kiss, L.L., Derekas, A.* 2004, IBVS 5555. (1a, 5b, 6d) Double star with RR Lyr and EB components.
QX Nor (4U 1608−52)	*Šimon, V.* 2004, A&A 418, 617. (2dx, 6ci) X-ray transient.
RS Oph	2004, IAU Circ. 8396. (1c) Outburst of recurrent nova in 1907.
V426 Oph	*Homer, L. et al.* (9 authors) 2004, ApJ 610, 991. (1ox, 2x) 4.2-hr period modulation discovered.
V2051 Oph	*Baptista, R., Bortoletto, A.* 2004, AJ 128, 411. (1ao, 5gi) Eclipse mapping of flickering sources in dwarf nova.
V2134 Oph (MXB 1659−29)	*Wijnands, R. et al.* (4 authors) 2004, ApJ 606, L61. (1bx) Cooling curve of heated neutron star crust.
V2388 Oph	*Yakut, K., Kalomeni, B., İbanoğlu, C.* 2004, A&A 417, 725. (1bo, 5cde)
V2574 Oph	2004, IAU Circ. 8323. (1ad, 4a, 6b) Possible new nova. 2004, IAU Circ. 8324. (1cd, 2c, 4a) Designation and new data. 2004, IAU Circ. 8328. (1d, 2c) Slow nova. 2004, IAU Circ. 8370. (2bi) Low-excitation phase.
FU Ori	*Reipurth, B., Aspin, C.* 2004, ApJ 608, L65. (1abi) Adaptive optics study of newly discovered companion.
FZ Ori	*Byboth, K.N., Markworth, N.L., Bruton, W.B.* 2004, IBVS 5554. (1a, 5abc, 6d) Photometric analyses of CB.
HK Ori	*Baines, D. et al.* (20 authors) 2004, MNRAS 353, 697. (2abc, 3a, 5g) Spectro-astrometry and EXPORT data.
85 Peg	*Griffin, R.F.* 2004, Observatory 124, 258. (2ao, 5d)
AG Peg	*Eriksson, M., Johansson, S., Wahlgren, G.M.* 2004, A&A 422, 987. (5g, 8b)
BX Peg	*Lee, J.W. et al.* (5 authors) 2004, MNRAS 352, 1041. (1ao, 5abcefg) Photometric study and physical parameters.
IP Peg	*Ishioka, R., et al.* (5 authors) 2004, PASJ 56, 481. (2ao, 5i) Line-profile variations during an eclipse.
LX Peg	*Wetterer, C., Majcen, S.* 2004, IBVS 5515. (1a, 5ab) W UMa-type EB.
β Per	*Chung, S.M. et al.* (5 authors) 2004, ApJ 606, 1184. (1bx) Doppler shifts and broadening in x-rays.
RY Per	*Barai, P. et al.* (13 authors) 2004, ApJ 608, 989. (2ac, 5j) Mass and angular momentum transfer in Algol.
GK Per	*Hellier, C., Harmer, S., Beardmore, A.P.* 2004, MNRAS 349, 710. (1bx, 5bgi) X-rays QPOs and accretion geometry.

V615 Per	*Southworth, J., Maxted, P.F.L., Smalley, B.* 2004, MNRAS 349, 547. (1ao, 2ab, 5abcde, 8c) Photometric and spectroscopic study.
σ Psc (HD 6118)	*Konacki, M., Lane, B.F.* 2004, ApJ 610, 443. (2a*, 4c, 5e, 7a) Interferometric orbit of SB.
WZ Sge	*Howell, S.B. et al.* (4 authors) 2004, PASP 116, 527. (1abo, 5bi) Superoutburst photometry.
V1223 Sgr	*Beuermann, K. et al.* (5 authors) 2004, A&A 419, 291. (4a, 6ei) CV
V4046 Sgr	*Stempels, H.C., Gahm, G.F.* 2004, A&A 421, 1159. (2ac, 5bg)
V4332 Sgr	*Banerjee, D.P.K., Ashok, N.M.* 2004, ApJ 604, L57. (1abo) Unusually strong KI and NaI lines in emission. *Banerjee, D.P.K. et al.* (5 authors) 2004, ApJ 610, L29. (2i) Null detection of radioactive ^{26}Al.
V4641 Sgr	*Umemura, M., et al.* (13 authors) 2004, PASJ 56, 823. (1ao) An outburst in 2003.
V4642 Sgr (Nova 2000)	*Venturini, C.C. et al.* (4 authors) 2004, AJ 128, 405. (2edi) Nova with unusual spectrum.
V5113 Sgr	2004, IAU Circ. 8370. (2bi) FeII-type nova.
V5114 Sgr	2004, IAU Circ. 8306. (1acd, 4a, 6b) Possible new nova. 2004, IAU Circ. 8307. (2c, 5g) Spectroscopic features. 2004, IAU Circ. 8310. (1a) Photometric evolution. 2004, IAU Circ. 8316. (1d) Visual magnitudes estimations. 2004, IAU Circ. 8368. (2ci, 5g) Coronal phase.
κ Sco	*Harmanec, P., Uytterhoeven, K., Aerts, C.* 2004, A&A 422, 1013. (2c) disentangling non radial oscillation in SB.
V1036 Sco (HD 159176)	*De Becker, M. et al.* (7 authors) 2004, A&A 416, 221. (2dx, 6gj)
V1186 Sco	2004, IAU Circ. 8369. (1acd, 2c, 4a, 6b) Possible new nova. 2004, IAU Circ. 8371. (1ad) Designation and magnitudes. 2004, IAU Circ. 8372. (1a)
V1187 Sco	2004, IAU Circ. 8380. (1a, 4a, 6b) Possible new nova. 2004, IAU Circ. 8381. (1ac, 2c, 4a) A classical nova? 2004, IAU Circ. 8382. (1ad, 2cdi, 5g) Spectroscopic features. 2004, IAU Circ. 8386. (2bi) High resolution data. 2004, IAU Circ. 8392. (2bi) 2004, IAU Circ. 8405. (2bi) ONeMg-type nova.
CR Sct	*Wolf, M. et al.* (9 authors) 2004, A&A 420, 619.(1ao, 5af)
AO Ser	*Kim, S.L. et al.* (5 authors) 2004, IBVS 5538. (1a, 6d) Short-period pulsating component.
MM Ser (Ser X-1)	*Masetti, N. et al.* (16 authors) 2004, A&A 423, 651. (1x) High state. *Migliari, S. et al.* (7 authors) 2004, MNRAS 351, 186. (1rx, 5g) Radio detection in soft x-ray sources.
RW Sex	*Hillwig, T., Livio, M., Honeycutt, R.K.* 2004, PASP 116, 397. (2ado) Unsuccessful search for collimated jet.
AH Tau	*Byboth, K.N., Markworth, N.L., Bruton, W.B.* 2004, IBVS 5554. (1a, 5abc, 6d) Photometric analyses of CB.
GR Tau	*Gu, S. et al.* (7 authors) 2004, A&A 423, 607. (1ao, 5bc)
V1062 Tau	*Lipkin, Y.M., Leibowitz, E.M., Orio, M.* 2004, MNRAS 349, 1323. (1ao, 5bgi) Low states, short outbursts and period switching.

RW Tri — *Groot, P.J., Rutten, R.G.M., van Paradijs, J.* 2004, A&A 417, 283. (2ad, 5i) Eclipsing nova-like CV.
Hillwig, T., Livio, M., Honeycutt, R.K. 2004, PASP 116, 397. (2ado) Unsuccessful search for collimated jet.

ζ TrA — *Skuljan, J., Ramm, D.J., Hearnshaw, J.B.* 2004, MNRAS 352, 975. (2a, 5abde) Orbital parameters.

UX UMa — *Hillwig, T., Livio, M., Honeycutt, R.K.* 2004, PASP 116, 397. (2ado) Unsuccessful search for collimated jet.

BZ UMa — *Price, A. et al.* (16 authors) 2004, IBVS 5526. (1a, 5c, 6d) Flickering and periodic activity in the 2004 outburst.

DW UMa — *Stanishev, V. et al.* (6 authors) 2004, A&A 416, 1057. (1a, 5i) Eclipsing nova-like CV.

EU UMa — *Somov, N.N. et al.* (4 authors) 2003, OAP 16, 69. (2c, 5g) Evidence for asynchronism in magnetic CV.

KV UMa (J1118+480) — *Malzac, J., Merloni, A., Fabian, A.C.* 2004, MNRAS 351, 253. (1oux, 5gi, 8ac) Understanding the optical/x-ray correlations.
Torres, M.A.P. (6 authors) 2004, ApJ 612, 1026. (2ao, 5ei) Observations in quiescence, Doppler tomograms.

GT UMa — *Mikuz, H. et al.* (4 authors) 2004, IBVS 5530. (1a, 5ab) Improved orbital ephemeris.

TU UMi — *Pych, W., Rucinski, S.M.* 2004, IBVS 5524. (1a, 5ab, 6d) Contact binary in triple system.

γ^2 Vel — *Schild, H. et al.* (10 authors) 2004, A&A 422, 177. (1x, 5gj)

GP Vel (Vela X-1) — *Goldstein, G., Huenemoerder, D.P., Blank, D.* 2004, AJ 127, 2310. (2dx, 5gi) Variation of x-ray line and continuum flux with orbital phase.

BH Vir — *Xiang, F.Y., Zhou, Y.C.* 2004, PASJ 56, 469. (5c) Spot activity.

NN Vir — *Pazhouhesh, R., Melendo, E.G.* 2003, OAP 16, 51. (1b, 2a, 6c) Radial-velocity and light-curve analysis of EB.

V407 Vul (RX J1914.4+2456) — *Norton, A.J., Haswell, C.A., Wynn, G.A.* 2004, A&A 419, 1025. (2dx*) Face-on, stream-fed intermediate polar.
Strohmayer, T.E. 2004, ApJ 610, 416. (1x) Accretion induced spin-up detected in double degenerate binary.

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

HR 1736 — *Griffin, R.F.* 2004, Observatory 124, 97. (2ao, 5d) Cool component of composite-spectrum system.

HR 3416 — *Griffin, R.F.* 2004, Observatory 124, 97. (2ao, 5d) Cool component of composite-spectrum system.

HR 6388 — *Griffin, R.F.* 2004, Observatory 124, 294. (2ao) No evidence for γ-velocity change.

HD 5980 — *Koenigsberger, G.* 2004, Rev. Mex. Astron. Astrofis. 40, 107. (2du, 5j) Stellar wind observations support view that companion is WR star.

HD 6118 — (see σ Psc)

HD 7205 — (see QU And)

HD 18955 — *Fekel, F.C., Henry, G.W., Alston, F.M.* 2004, AJ 127, 2303. (1bo, 2ao, 5d) Chromospherically active binary with eccentric orbit.

HD 23642	*Munari, U. et al.* (6 authors) 2004, A&A 418, L31. (1bo, 2ao, 5cde) Distance to Pleiades from double-lined eclipsing binary parameters.
HD 27483	*Konacki, M., Lane, B.F.* 2004, ApJ 610, 443. (2a*, 4c, 5e, 7a) Interferometric orbit of Hyades SB with 3-day period.
HD 38563S	*Yanagida, T., Ezoe, Y.-I., Makishima, K.* 2004 PASJ 56, 813. (1ax, 2x) X-ray flares.
HD 44179	*Cohen, M. et al.* (4 authors) 2004, AJ 127, 2362. (1bou, 5j) Deep images of surrounding nebula ("red rectangle") reveal structure.
HD 142353	*Griffin, R.F.* 2004, Observatory 124, 190. (2ao, 5d)
HD 152248	*Sana, H. et al.* (5 authors) 2004, MNRAS 350, 809. (1ax, 5eg, 8c) Results of an *XMM-Newton* campaign.
HD 153919 (4U 1700−37)	*Abubekerov, M.K.* 2004, AZh, 81, 714.(5x, 2a, 6c) Mass of compact object in x-ray binary.
HD 159176	(see V1036 Sco)
HD 164025	*Griffin, R.F.* 2004, Observatory 124, 190. (2ao, 5d)
HD 165007	*Griffin, R.F.* 2004, Observatory 124, 190. (2ao, 5d)
HD 181958	*Ramm, D.J., Skuljan, J., Hearnshaw, J.B.* 2004, Observatory 124, 167. (2ao, 5d)
HD 199378/9	*Griffin, R.F.* 2004, Observatory 124, 97. (2ao, 5d) Cool component of composite-spectrum system.
HD 209746	*Griffin, R.F.* 2004, Observatory 124, 190. (2ao, 5d)
HD 211853	*Kartasheva, T.A.* 2002, Bull. Special Astroph. Obs. 54, 46. (3a) Polarimetric studies of multiple system including a WR star.
HD 221866	*Kaye, A.B., Gray, R.O., Griffin, R.F.* 2004, PASP 116, 558. (2abo, 5d) Also reanalysis of published photometry and period confirmation
HDE 258878	(see OW Gem)
BD+60°497	*Rauw, G. De Becker, M.* 2004, A&A 421, 693. (2ao, 5d)
BD+48°1048	*Griffin, R.F.* 2004, Observatory 124, 97. (2ao, 5d) Cool component of composite-spectrum system.

X-ray sources with constellation names

Aql X-1	(see V1333 Aql)
Cyg X-1	(see V1357 Cyg)
Cyg X-2	(see V1341 Cyg)
Cyg X-3	(see V1521 Cyg)
Her X-1	(see HZ Her)
Ser X-1	(see MM Ser)
Vela X-1	(see GP Vel)

Object names including RA and DEC

XMMU J001528.9−391319	*Stobbart, A.-M., Roberts, T.P., Warwick, R.S.* 2004, MNRAS 351, 1063. (1x, 5gi, 6b) A black hole candidate.
RX J0048.4−7332	(see SMC X-3)

AX J0049.4−7323	*Coe, M.J., Edge, W.R.T.* 2004, MNRAS 350, 756. (1aobx, 5b) Neutron star interacting with a circumstellar disc.
4U 0115+63	*Mihara, T., Makishima, K., Nagase, F.* 2004, ApJ 610, 390. (1x, 2x) Changes in cyclotron resonance structure in ∼1 year.
SDSS J013701.06−091234.9	*Pretorius, M.L. et al.* (6 authors) 2004, MNRAS 352, 1056. (1ao, 5abcg) High-speed photometry and orbital modulation.
PSR J0514−4002A	*Freire, P.C. et al.* (4 authors) 2004, ApJ 606, L53. (1br,2ab,3b) Millisecond pulsar in highly eccentric binary in globular cluster.
2MASS J0516288+260738	*Schuh, S. et al.* (6 authors) 2004, Astron. Nachr. 325 Suppl. 1/2004, 84. (1ao, 2bd, 5c) Detection and LC analysis of EB with possible brown dwarf component.
RX J0520.5−6932	*Edge, W.R.T. et al.* (4 authors) 2004, MNRAS 349, 1361.(1abox, 2d, 5bg) A major outburst.
EXO 053109−6609.2	*Rea, N. et al.* (5 authors) 2004, A&A 421, 235. (1x, 5i) Timing and spectral study of HMXB.
MACHO 053441.3−693139	*Bauer, M., Drechsel, H.* 2004, Astron. Nachr. 325 Suppl. 1/2004, 93. (1ao, 5c) LC analysis of O-type overcontact EB.
A0535+26	*Haigh, N.J., Coe, M.J., Fabregat, J.* 2004, MNRAS 350, 1457. (1ai, 2c, 5gi, 8b) Cyclical behaviour and disc truncation.
A0620−00	*González Hernández, J.I. et al.* (4 authors) 2004, ApJ 609, 988. (2co) Abundances of secondary star.
J0737−3039	*Dewi, J. D. M., van den Heuvel, E. P. J.* 2004, MNRAS 349, 169. (8ac) Formation history. *Granot, J., Meszaros, P.* 2004, ApJ 609, L17. (8) Shocked wind in binary pulsar. *Jenet, F.A., Ransom, S.M.* 2004, Nature 428, 919. (1r) Geometry of double-pulsar from radio flux. *McLaughlin, M.A. et al.* (10 authors) 2004, ApJ 605, L41. (1bx) No observed variability with phase. *Ransom, S.M. et al.* (8 authors) 2004, ApJ 609, L71. (1r, 2ar) Clues to formation.
RX J0806.3+1527	*Hakala, P., Ramsay, G., Byckling, K.* 2004, MNRAS 353, 453. (1ao, 5ab) Distinguishing between competing physical models. *Norton, A.J., Haswell, C.A., Wynn, G.A.* 2004, A&A 419, 1025. (2dx*) Face-on, stream-fed intermediate polar.
J1118+480	(see KV UMa)
HS 1136+6646	*Sing, D.K. et al.* (11 authors) 2004, AJ 127, 2936. (1bo, 2ao, 2du, 5b) Pre-CV binary.
PSR B1259−63 (SS 2883)	*Kawachi, A. et al.* (46 authors) 2004, ApJ 607, 949. (1a) Search for Tev γ-ray emission. *Wang, N., Johnson, S., Manchester, R.N.* 2004, MNRAS 351, 599. (1r, 5abegk) Results of 13 year of timing observations.
2S 1417−62	*Inam, S. C. et al.* (5 authors) 2004, MNRAS 349, 173. (1bx, 5dgi) X-ray flux related timing and spectral features.
J151453.6+020934.2	*Rykoff, E.S. et al.* (15 authors) 2004, IBVS 5559. (1a, 6bd) Discovery of ROTSE3 CV.
4U 1538−52	*Clark, G.W.* 2004, ApJ 610, 956. (1x, 2x) Grain-scattered x-ray halo studied.

4U 1543−47	*Park, S.Q. et al.* (11 authors) 2004, ApJ 610, 378. (1x, 2x) Observations during 2002 outburst.
PG 1544+488	*Ahmad, A., Jeffery, C.S., Fullerton, A.W.* 2004, A&A 418, 275. (2aou, 6d, 7b) He-sdB system.
XTE J1550−564	*Rodriquez, J. et al.* (5 authors) 2004, ApJ 612, 1018. (1x, 2x) QPO's during 2000 outburst.
MS 1603.6+2600	(see UW CrB)
4U 1608−52	(see QX Nor)
XTE J1650−500	*Miniutti, G., Fabian, A.C., Miller, J.M.* 2004, MNRAS 351, 466. (1x, 5gh) Evidence for black hole spin and light bending effects.
MXB 1659−29	(see V2134 Oph)
4U 1700−37	(see HD 153919)
XTE J1807−294	*Kirsch, M.G.F. et al.* (7 authors) 2004, A&A 423, L9. (1x, 5bj)
SAX J1810.8−2609	*Jonker, P.G., Wijnands, R., van der Klis, M.* 2004, MNRAS 349, 94. (1ax, 5gi, 6c) Detection of new sources and neutron star.
4U 1820−30	*Migliari, S. et al.* (7 authors) 2004, MNRAS 351, 186. (1rx, 5g) Radio detection in soft x-ray sources. *Shaposhnikov, N., Titarchuk, L.* 2004, ApJ 606, L57. (1bx) Flux variability during expansion to constrain NS parameters.
PSR J1829+2456	*Champion, D.J. et al.* (7 authors) 2004, MNRAS 350, L61. (1r, 5ef) A new relativistic binary pulsar.
XTE J1908+094	*Göğüş, E. et al.* (9 authors) 2004, ApJ 609, 977. (1x, 2x) Long term behaviour. *Jonker, P.G. et al.* (6 authors) 2004, MNRAS 351, 1359. (1rx, 5gi) A study of disc-jet connection.
RX J1914.4+2456	(see V407 Vul)
GRS 1915+105	(see V1487 Aql)
XB 1916−053	(see V1405 Aql)
SAX J2103.5+4545	*Reig, P. et al.* (6 authors) 2004, A&A 421, 673. (1aio, 5i, 6c)
XTE J2123−058	*Tomsick, J.A. et al.* (4 authors) 2004, ApJ 610, 933. (1x, 2x) X-ray transient in quiescent mode.
X2127+119	*van Zyl, L. et al.* (6 authors) 2004, MNRAS 350, 649. (2cd, 5gh, 8c) Evidence for a very low mass, stripped-giant companion.
PSR J2140−23B	*Ransom. S.M. et al.* (7 authors) 2004, ApJ 604, 328. (1br) Discovery of 13 ms pulsar in highly eccentric relativistic orbit.
PSR J2140−2310A	*Ransom. S.M. et al.* (7 authors) 2004, ApJ 604, 328. (1br) Discovery of 11 ms pulsar in four-hour circular orbit.
4U 2206+54	*Torrejón, J.M. et al.* (5 authors) 2004, A&A 423, 301. (8a) evidence for NS component. *Masetti, N. et al.* (7 authors) 2004, A&A 423, 311. (1x, 8a)
J221519.8−003257.2	*Rykoff, E.S. et al.* (15 authors) 2004, IBVS 5559. (1a, 6bd) Discovery of ROTSE3 CV.
HS 2237+8154	*Gänsicke, B. T. et al.* (7 authors) 2004, A&A 418, 265. (1ao, 2ao, 6d) Pre-CV, CV in period gap, or hibernating nova.
HS 2333+3927	*Heber, U. et al.* (11 authors) 2004, A&A 420, 251. (1ao, 2ac)

Karl, C.A. et al. (11 authors) 2004, Ap&SS 291, 283. (1ao, 2ac)

Galactic objects with other designations

GSC 3449-0688 — *Nelson, R.H., Henden, A.A., Krajci, T.* 2004, IBVS 5546. (1a, 5abc) New solar-type overcontact binary.

GX 13+1 — *Homan, J. et al.* (7 authors) 2004, A&A 418, 255. (2d, 5rx) Simultaneous radio and x-ray observations of LMXB.
Ueda, Y. et al. (5 authors) 2004, ApJ 609, 325. (1x, 2x, 8) ∼500 km/s plasma wind detected in LMXB.

GX 339-4 — (see V821 Ara)

KH 15D — *Johnson, J.A., Winn, J.N.* 2004, AJ 127, 2344. (1bo*) Changing light curve of pre-main-sequence ED.
Johnson, J.A. et al. (5 authors) 2004, AJ 128, 1265. (2ao, 5d) Spectroscopic orbit of very young object. Deep eclipses appear to be due to pre-stellar companion.

LS I +61°303 — *Massi, M.* 2004, A&A 422, 267. (5i, 8a)
Mirabel, I.F., Rodrigues, I., & Liu, Q.Z. 2004, A&A 422, L29. (4a)

Macho 81.8997.87 — *Lepischak, D., Welch, D.L., van Kooten, P.B.M.* 2004, ApJ 611, 1100. (1aio, 5e) Eclipsing overtone Cepheid.

MWC 560 — (see V694 Mon)

Nova in Her — 2004, IAU Circ. 8363. (1acd, 2c, 4a, 6b) Unusual CV.
2004, IAU Circ. 8367. (10b)
2004, IAU Circ. 8369. (1a)
2004, IAU Circ. 8374. (1c, 4a)

SS 2883 — (see PSR B1259−63)

WR 3 — *Marchenko, S.V. et al.* (9 authors) 2004, MNRAS 353, 153. (1bo, 2ac, 5bcdegi) Modelling based on spectroscopy and photometry.

WR 48c — *Oliveira, A.S., Steiner, J.E.* 2004, MNRAS 351, 685. (1ao, 2abc, 5abcdegh) Photometric and spectroscopic study. A possible Type Ia supernova progenitor.

WR 140 — *Varricatt, W.P., Williams, P.M., Ashok, N.M.* 2004, MNRAS 351, 1307. (2cdi, 5gf) Near-infrared spectroscopy.

Extragalactic close binaries

SMC X-1 — *Naik, S., Paul, B.* 2004, A&A 418, 655. (2dx) Accretion powered x-ray pulsar.

SMC X-3 (RX J0048.4−7332) — *Cowley, A.P., Schmidtke, P.C.* 2004, AJ 128, 709. (1ao*, 5b) Period determination from MACHO optical photometry.
Kahabka, P. 2004, A&A 416, 57. (2dx*, 1ao) Symbiotic nova.

Novae in M31 — 2004, IAU Circ. 8404. (1a, 2b, 4a, 6b) Discovery of two possible novae.

M81 X-9 — *Miller, J.M., Fabian, A.C., Miller, M.C.* 2004, ApJ 607, 931. (1bx) Cool AD, evidence for intermediate-mass BH.

SN 2001ig — *Ryder, S.D. et al.* (6 authors) 2004, MNRAS 349, 1093. (1r, 5c, 8c) Evidence for a Wolf-Rayet binary progenitor.

General

Abubekerov, M.K., Antokhina, E.A., Cherepashchuk, A.M. 2004, AZh 81,108. Masses of x-ray pulsars in binary systems with OB supergiants.

Aigrain, S., Irwin, M. 2004, MNRAS 350, 331. Practical planet prospecting.

Althaus, T. 2004, Sterne & Weltraum 43, 15. Superheiße Jupiter (hot exoplanets).

Andronov, I.L. et al. (9 authors) 2003, OAP 16, 7. Structure and evolution of the prototype magnetic CV AM Her: clues from x-ray (Chandra) and optical polarimetry and photometry. four-component model of the autocorrelation function.

Aoki, S.I. et al. (5 authors) 2004, ApJ 610, 897. QPO's caused by periodic shocks in accretion disk. (8b)

Argast, D. et al. (4 authors) 2004, A&A 416, 997. Neutron star mergers versus core-collapse supernovae as dominant r-process sites in the early Galaxy.

Argyle, R.W. 2004, Observatory 124, 94. Summary of IAU discussion on new classification scheme for double and multiple stars.

Ballantyne, D.R. 2004, MNRAS 351, 57. Reflection spectra from an accretion disc illuminated by a neutron star x-ray burst.

Bath, G.T. 2004, MNRAS 349, 1505. Mass-transfer bursts and the superhumps in cataclysmic variables.

Beckwith, K., Done, C. 2004, MNRAS 352, 353. Iron line profiles in strong gravity.

Belczynski, K., Bulik, T., Rudak, B. 2004, ApJ 608, L45. Theoretical description of physical properties of Population III binary BH's.

Benvenuto, O.G., De Vito, M.A. 2004, MNRAS 352, 249. The formation of a helium white dwarf in a close binary system with diffusion.

Bildsten, L., Deloye, C.J. 2004, ApJ 607, L119. Ultracompact binaries as bright x-ray sources in elliptical galaxies.

Bisikalo, D.V. et al. (5 authors) 2004, AZh 81, 494. Structure of cool accretion disks in semidetached binaries.

Bitzaraki, O.M. et al. (4 authors) 2004, A&A 416, 263. Luminous supersoft x-ray sources.

Blandford, R.D., Begelman, M.C. 2004, MNRAS 349, 68. Two-dimensional adiabatic flows on to a black hole - I. Fluid accretion.

Brett, D.R., West, R.G., Wheatley, P.J. 2004, MNRAS 353, 369. The automated classification of astronomical light curves using Kohonen self-organizing maps.

Bridge, C.M. et al. (4 authors) 2004, MNRAS 351, 1423. Accretion stream mapping with "genetically modified fireflies".

Broderick, A., Blandford, R. 2004, MNRAS 349, 994. Covariant magnetoionic theory. - II. Radiative transfer.

Budding, E. et al. (8 authors) 2004, A&A 417, 263. (7a) Catalogue of Algol-type binary stars.

Bulik, T., Belczynski, K. 2004, Baltic Astronomy 13, 280. Compact object mergers as progenitors of short γ-ray bursts.

Bulik, T., Rosinska-Gondek, D., Belczynski, K. 2004, MNRAS 352, 1372. Expected masses of merging compact objects binaries observed in gravitational waves.

Büning, A., Ritter, H. 2004, A&A 423, 281. Long-term evolution of compact binaries with irradiation feedback.

Chakrabarti, S.K., Das, S. 2004, MNRAS 349, 649. Properties of accretion shock waves in viscous flows around black holes.

Cherepashchuk, A.M., Karetnikov, V.G. 2003, OAP, 16, 27. Evolutionary effects in close binaries: analysis of the distribution of orbital eccentricities.

Cieslinski, D. et al. (4 authors) 2004, PASP 116, 610. Discovery of 28 probable and 38 possible new CVs from MACHO database.

Claret, A. 2004, A&A 422, 665. On the irradiated stellar atmospheres in close binary systems: Improvements and uncertainties.

Clarke, C.J., Pringle, J.E. 2004, MNRAS 351, 1187. Kinetic theory viscosity.

Daigne, F., Font, J.A. 2004, MNRAS 349, 841. The runaway instability of thick discs around black holes - II. Non-constant angular momentum discs.

Das, T.K. 2004, MNRAS 349, 375. Behaviour of matter close to the event horizon.

Delgado-Donate, E. 2004, Observatory 124, 310. Multiple-star formation in molecular cloud cores. (10a)

Delgado-Donate, E.J. et al. (4 authors) 2004, MNRAS 351, 617. On the properties of young multiple stars.

Dryomova, G.N., Svechnikov, M.A. 2001, AZh 17, 121. Estimation of time scales for the transition from detached to contact close binaries.

Edelmann, H. et al. (4 authors) 2004, Ap&SS 291, 315. Radial velocity curves of nine sdB binary stars.

Eichhorn, C., Spurzem, R. 2004, Astron. Nachr. 325 Suppl. 1/2004, 127. Evolution of massive BH binaries in rotating King models.

Eldridge, J.J., Tout, C.A. 2004, MNRAS 353, 87. The progenitors of core-collapse supernovae.

Feng, H., Li, T.P., Zhang, S.N. 2004, ApJ 606, 424. Timescale analysis of shot width to distinguish between BH and NS binaries.

Foulkes, S.B. et al. (4 authors) 2004, MNRAS 349, 1179. Simulations of spectral lines from an eccentric precessing accretion disc.

Fregeau, J.M. et al. (4 authors) 2004, MNRAS 352, 1. Stellar collisions during binary-binary and binary-single star interactions.

Georgiev, L.N., Koenigsberger, G. 2004, A&A 423, 267. Line profile variations in WR+O binary systems. I. The code and basic predictions.

Ghanbari, J., Abbassi, S. 2004, MNRAS 350, 1437. Equilibria of a self-gravitating, rotating disc around a magnetized compact object.

Gilfanov, M. 2004, MNRAS 349, 146. Low-mass x-ray binaries as a stellar mass indicator for the host galaxy.

Gilfanov, M., Grimm, H.-J., Sunyaev, R. 2004, MNRAS 351, 1365. Statistical properties of the combined emission of a population of discrete sources: astrophysical implications.

González, R.F., Raga, A.J. 2004, Rev. Mex. Astron. Astrofis. 40, 61. Herbig-Haro jets from sources in elliptical orbits.

Green, E.M. et al. (10 authors) 2004, Ap&SS 291, 267. Companions of post-common-envelope sdB binaries.

Gualandris, A., Zwart, S.P., Eggleton, P.P. 2004, MNRAS 350, 615. N-body simulations of stars escaping from the Orion nebula.

Haberl, F. et al. (5 authors) 2004, A&A 420, L19. Two long-period x-ray pulsars detected in the SMC field around XTE J0055-727.

Han, Z., Podsiadlowski, Ph. 2004, MNRAS 350, 1301. The single-degenerate channel for the progenitors of Type Ia supernovae.

Harrison, T.E., Osborne, H.L., Howell, S.B. 2004, AJ 127, 3493. Abundance anomalies in secondaries of long-period CVs.

Hayasaki, K., Okazaki, A.T. 2004, MNRAS 350, 971. Accretion disc formation around the neutron star in Be/x-ray binaries.

Holzwarth, V. 2004, Astron. Nachr. 325, 408. Spot signatures of a solar-type dynamo in CBs.

Honeycutt, R.K., Kafka, S. 2004, AJ 128, 1279. Characteristics of high-state/low-state transitions in VY Scl stars.

Horák, J., et al. (4 authors) 2004, PASJ 56, 819. Of NBOs and kHz QPOs: A low-frequency modulation in resonant oscillations of relativistic accretion disks.

Horvath, J.E., Lugones, G. 2004, A&A 422, L1. Self-bound CFL stars in binary systems: Are they "hidden" among the black hole candidates?

Huang, R.Q. 2004, A&A 422, 981. Evolution of rotating binary stars.

Izzard, R.G., Tout, C.A. 2004, MNRAS 350, L1. A binary origin for low-luminosity carbon stars.

Jenkins, L.P. et al. (5 authors) 2004, MNRAS 349, 404. An *XMM-Newton* view of M101 - I. The luminous x-ray source population.

Jose, J. et al. (5 authors) 2004, ApJ 612, 414. The imprint of nova nucleosynthesis in presolar grains.(9)

Jung, Y-C., Lee, H-W. 2004, MNRAS 350, 580. On the centre shifts of Raman-scattered He II and Hα wings in symbiotic stars.

Karataş, Y. et al. (4 authors) 2004, MNRAS 349, 1069. Kinematics of chromospherically active binaries and evidence of an orbital period decrease in binary evolution.

Kasan, D. et al. (4 authors) 2004, ApJ 610, 876. Conical hole carved by companion star in Type Ia SN. (8a)

Kato, Y. 2004, PASJ 56, 931. 2:3 twin quasi-periodic oscillations in magnetohydrodynamic accretion flows.

Komissarov, S.S. 2004, MNRAS 350, 427. Electrodynamics of black hole magnetospheres.

Komissarov, S.S. 2004, MNRAS 350, 1431. General relativistic magnetohydrodynamic simulations of monopole magnetospheres of black holes.

Kouwenhoven, T. et al. (6 authors) 2004, Astron. Nachr. 325 Suppl. 1/2004, 101. Recovering the primordial binary population using simulating observations of simulations.

Krzysztof, B., Sadowski, A., Rasio, F.A. 2004, ApJ 611, 1068. A comprehensive study of BH populations.(9)

Lanza, A.F., Rodonò, M. 2004, Astron. Nachr. 325, 393. Magnetic activity and dynamics of CBs.

Li, L., Han, Z., Zhang, F. 2004, MNRAS 351, 137. Structure and evolution of low-mass W UMa-type systems.

Lisker, T. et al. (6 authors) 2004, Ap&SS 291, 351. Spectroscopic analysis of sdB stars from the ESO supernova Ia progenitor survey.

Livio, M. 2004, Baltic Astronomy 13, 273. Astrophysical jets.

Lodato, G., Rice, W.K.M. 2004, MNRAS 351, 630. Testing the locality of transport in self-gravitating accretion discs.

Lu, J-F., Li, S-L., Gu, W-M. 2004, MNRAS 352, 147. Global dynamics of radiatively inefficient accretion flows: advection versus convection.

Maccarone, T.J. 2004, MNRAS 351, 1049. Radio emission as a test of the existence of intermediate-mass black holes in globular clusters and dwarf spheroidal galaxies.

Mapelli, M. et al. (8 authors) 2004, ApJ 605, L29. The contribution of primordial binaries to the blue straggler population in 47 Tuc.

Markoff, S., Nowark, M.A. 2004, ApJ 609, 972. Constraining x-ray binary jet model via reflection. (8b)

Marsh, T.R., Nelemans, G., Steeghs, D. 2004, MNRAS 350, 113. Mass transfer between double white dwarfs.

Maxted, P.F.L., Morales-Rueda, L., Marsh, T.R. 2004, Ap&SS 291, 307. Companions to sdB binaries-degenerate or non-degenerate?

Meintjes, P.J. 2004, MNRAS 352, 416. Magnetized fragmented mass transfer in cataclysmic variables: AE Aquarii, a trial case.

Menou, K. 2004, MNRAS 352, 1381. Differential rotation in weakly magnetized neutron star atmospheres.

Meyer-Hofmeister, E. 2004, A&A 423, 321. Why soft x-ray transients can remain in the low/hard state during outburst.

Miniutti, G., Fabian, A.C. 2004, MNRAS 349, 1435. A light bending model for the x-ray temporal and spectral properties of accreting black holes.

Morales-Rueda, L., Maxted, P.F.L., Marsh, T.R. 2004, Ap&SS 291, 299. The orbital period distribution of subdwarf-B binaries.

Mugrauer, M. et al (5 authors) 2004, Astron. Nachr. 325 Suppl. 1/2004, 82. Search for (sub)stellar companions of exoplanet host stars.

Nagae, T. et al. (6 authors) 2004, A&A 419, 335. Wind accretion in binary stars. I. Mass accretion ratio.

Napiwotzki, R. et al. (8 authors) 2004, Ap&SS 291, 321. Close binary EHB stars from SPY.

Nelan, E.P. et al. (7 authors) 2004, AJ 128, 323. Observation of OB systems in Carina nebula with HST FGS yields new information on known O-type SBs.

Nelemans, G., Yungelson, L.R., Zwart, S.F.P 2004, MNRAS 349, 181. Short-period AM CVn systems as optical, x-ray and gravitational-wave sources.

Nelson, R.P., Papaloizou, J.C.B. 2004, MNRAS 350, 849. The interaction of giant planets with a disc with MHD turbulence - IV. Migration rates of embedded protoplanets.

Neßlinger, S., Drechsel, H. 2004, Astron. Nachr. 325 Suppl. 1/2004, 102. Fundamental quantities of close OB-type binaries in the LMC.

Neuhäuser, R., Guenther, E., Wuchterl, G. 2004, Astron. Nachr. 325 Suppl. 1/2004, 85. Direct imaging of sub-stellar companions: from brown dwarfs to massive planets.

Oka, K. et al. (4 authors) 2004, A&A 419, 277. Numerical simulation of the surface flow on the companion star in a close binary system. II. Construction of Doppler maps and application to Galactic supersoft x-ray sources.

Okuda, T., et al. (4 authors) 2004, PASJ 56, 547. Radiative shocks in rotating accretion flows around BHs.

Otazu, X. et al. (5 authors) 2004, MNRAS 351, 215. Multiresolution approach for period determination on unevenly sampled data.

Papaloizou, J.C.B., Nelson, R.P., Snellgrove, M.D. 2004, MNRAS 350, 829. The interaction of giant planets with a disc with MHD turbulence - III. Flow morphology and conditions for gap formation in local and global simulations.

Parsons, S.B. 2004, AJ 127, 2915. Additional components found for several binaries with hot component and cooler evolved one, from IUE SEDs.

Payne, D.J.B., Melatos, A. 2004, MNRAS 351, 569. Burial of the polar magnetic field of an accreting neutron star -I. Self-consistent analytic and numerical equilibria.

Piro, A.L., Bildsten, L. 2004, ApJ 610, 977. Spreading accreted material onto a WD. (8b)

Podsiadlowski, P., Han, Z. 2004, Ap&SS 291, 291. The progenitors of sdB binaries: confronting theory with observations.

Podsiadlowski, P.H. et al. (5 authors) 2004, ApJ 612, 1044, The effects of binary evolution on the dynamics of core collapse and neutron star kicks.(8)

Politano, M. 2004, ApJ 604, 817. The formation of CV's with brown dwarf secondaries.

Pols, O. 2004, MmSAI 75, 749. Effects of binarity on asymptotic giant branch evolution.

Popov, S.B. 2004, A&A, 418, 699. On the spin evolution of neutron stars in pre-low mass x-ray binaries.

Ramirez-Ruiz, E., Serenelli, A.M. 2004, MNRAS 353, L7. Supernova 1993J: a veiled pulsar in a binary system?

Rebusco, P. 2004, PASJ 56, 553. Twin peaks kHz QPOs: Mathematics of the 3:2 orbital resonance.

Reed, M.D., Stiening, R. 2004, Ap&SS 291, 329. Using 2MASS to detect main sequence companions to subdwarf B stars.

Rezzolla, L., Ahmedov, B.J. 2004, MNRAS 352, 1161. Electromagnetic fields in the exterior of an oscillating relativistic star - I. General expressions and application to a rotating magnetic dipole.

Robertson, S.L., Leiter, D.J. 2004, MNRAS 350, 1391. On the origin of the universal radio−x-ray luminosity correlation in black hole candidates.

Romanova, M.M. et al. (4 authors) 2004, ApJ 610, 920. Disk accretion onto a magnetically inclined star (8a)

Rosswog, S., Speith, R., Wynn, G.A. 2004, MNRAS 351, 1121. Accretion dynamics in neutron star-black hole binaries.

Savokhin, D.P. 2004, AZh 81, 134. Axially symmetrical models of the products of a conservative merger of binary WDs with similar component masses.

Schmidtke, P.C. et al. (4 authors) 2004, AJ 127, 3388. Multiperiodic variability in Mag. Cloud Be/x-ray binaries.

Sirotkin, F.V. 2003, OAP, 16, 58. 3-D hydrodynamical modeling of circularization in binary systems.

Snellen, I.A.G. 2004, MNRAS 353, L1. A new method for probing the atmospheres of transiting exoplanets.

Soker, N. 2004, MNRAS 350, 1366. Wind accretion by a binary stellar system and disc formation.

Soker, N., Lasota, J.P. 2004, A&A 422, 1039. The absence of jets in cataclysmic variable stars.

Spurzem, R. et al. (4 authors) 2004, Astron. Nachr. 325, Suppl. 1/2004, 33. Gravitational radiation from BH triple systems.

Stairs, I.H. 2004, Science 204, 547. Pulsars in binary systems: probing stellar evolution and general relativity.

Stergioulas, N., Apostolatos, T., Font, J.A. 2004, MNRAS 352, 1089. Non-linear pulsations in differentially rotating neutron stars: mass-shedding-induced damping and splitting of the fundamental mode.

Teresi, V., Molteni, D., Toscano, E. 2004, MNRAS 351, 297. *Ab initio* simulations of accretion disc instability.

Tomisaka, K., Machida, M.N., Matsumoto, T. 2004, Ap&SS 292, 309. Contraction and fragmentation of magnetized rotating clouds and formation of binary systems.

Tsangarides, S., Ryan, S.G., Beers, T.C. 2004, MmSAI 75, 772. On the binarity of carbon-enhanced, metal-poor stars.

Tutukov, A.V., Cherepashchuk, A.M. 2004, AZh 81,43. Massive CB stars and γ-ray bursts.

Tutukov, A.V., Dremova, G.N., Svechnikov, M.A. 2004, AZh 81, 244. Evolutionary connection of low-mass detached binaries, contact W UMa systems and blue stragglers.

Umbreit, S. et al. (5 authors) 2004, Astron. Nachr. 325 Suppl. 1/2004, 35. Brown dwarfs from decaying accreting triple systems.

Van Winckel, H. 2004, MmSAI 75, 766. Binary post-AGB stars.

Wade, R.A., Stark, M.A. 2004, Ap&SS 291, 337. Are all hot subdwarf stars in close binaries?

Watson, C.A., Dhillon, V.S. 2004, MNRAS 351, 110. The effect of star-spots on eclipse timings of binary stars.

Willems, B., Kolb, U. 2004, A&A 419, 1057. Detached white dwarf main-sequence star binaries.

Willes, A.J., Wu, K., Kuncic, Z. 2004, Publ. Astron. Soc. Australia 21, 248. Radio emission from ultrashort-period double degenerate binaries.

Wilson, J.R., Mathews, G.J. 2004, ApJ 610, 368. Type I SN from relativistic compression of WD on approaching a BH. (8)

Yoon, S.-C., Langer, N. 2004, A&A 419, 623. Presupernova evolution of accreting white dwarfs with rotation.

Yoon, S.-C., Langer, N. 2004, A&A 419, 645. Helium accreting CO white dwarfs with rotation: Helium novae instead of double detonation.

Zwat, S.F.P. et al. (4 authors) 2004, MNRAS 351, 473. Star cluster ecology - V. Dissection of an open star cluster: spectroscopy.

Życki, P.T. 2004, MNRAS 351, 1180. Modelling the variability of the Fe Kα line in accreting black holes.

Collections of data

Baran, A. et al. (6 authors) 2004, Acta Astronomica 54, 195. (1ab, 2a, 5cde) AB And, GZ And, AO Cam, DN Cam, DK Cyg.

Bayne, G.P. et al. (5 authors) 2004, MNRAS 349, 833. (1ao, 5abcefg) CCD photometry and modelling of Magellanic Cloud binaries: MOA J005018.4−723855, MOA J005623.5−722123, MACHO* 05:36:48.7−69:17:00.

Belle, K.E. et al. (5 authors) 2004, AJ 128, 448. (2ci*, 1bi) Line identifications in search for circumbinary disks in CVs: QU Car, V592 Cas, EX Hya, DI Lac, TZ Per, V3885 Sgr, IX Vel.

Blättler, E., Diethelm, R. 2004, IBVS 5516. (1a, 5ab) CCD LC of ROTSE1 variables XX: GSC 3510:1283 Her, GSC 2618:1385 Her, GSC 2614:1369 Her, GSC 2615:1821 Her.

Blättler, E., Diethelm, R. 2004, IBVS 5525. (1a, 5ab) CCD LC of ROTSE1 variables XXI: GSC 3108:57 Lyr, GSC 3526:1995 Lyr, GSC 3109:859 Lyr, GSC 3526:2369 Lyr.

Blättler, E., Diethelm, R. 2004, IBVS 5541. (1a, 5ab) CCD LC of ROTSE1 variables XXII: GSC 2533:1519 CVn, GSC 2534:1121 CVn, GSC 2537:520 CVn, GSC 2544:1007 CVn.

Boyd, P.T., Smale, A.P. 2004, ApJ 612, 1006. (1x*): Long term LCs of XRB's contain periodic and random components: LMC X-3, V1341 Cyg (Cyg X-2), V1521 Cyg (Cyg X-3).

Carquillat, J.-M. et al. (5 authors) 2004, MNRAS 352, 708. (2a, 5deg) Orbital elements of ten spectroscopic binaries: HD 19342, HD 19910, HD 36360, HD 102925, HD 126031, HD 127263, HD 138406, HD 155714, HD 195692, HD 199360.

Catanzaro, G., Leto, P. 2004, A&A 416, 661. (5d) Orbital solutions for SB2 systems with a HgMn component. (HD 358 = HR 15, HD 32964 = HR 1657, HD 33647 = HR 1690, HD 173524 = HR 7049, HD 174933 = HR 7113, HD 191110 = HR 7694, HD 216494 = HR 8704). (2ao, 6d)

Darnley, M.J. et al. (19 authors) 2004, MNRAS 353, 571. (1ao, 5g) A catalogue of 20 classical novae from POINT-AGAPE microlensing survey of M31: PACN-99-01, PACN-99-02, PACN-99-03, PACN-99-04, PACN-99-05, PACN-99-06, PACN-99-07, PACN-00-01, PACN-00-02, PACN-00-03, PACN-00-04, PACN-00-05, PACN-00-06, PACN-00-07, PACN-01-01, PACN-01-02, PACN-01-03, PACN-01-04, PACN-01-05, PACN-01-06.

Diethelm, R. 2004, IBVS 5543. (5a) 163. List of minima timings of EB by BBSAG Observers: 559 timings of minima.

Dubus, G. et al. (5 authors) 2004, MNRAS 349, 869. (1aio, 5gi, 8b) Excess mid-infrared emission in CVs: QR And, RX And, AE Aqr, HU Aqr, SS Cyg, IP Peg, WZ Sge, RW Tri.

Dworak, S.W. 2004, IBVS 5542. (5b) Updated elements for southern EB: WZ Ant, HL Aps, II Aps, LR Ara, V489 Ara, V491 Ara, DK Car, PX Car, LW Cen, V380 Cen, V677 Cen, VW CMa, YY CMa, RZ Col, UU CrA, SZ Cru, TU Cru, AY Cru, DS Eri, RU Gru, RY Gru, AK Gru, TV Ind, RR Men, TV Mic, UZ Mic, VY Mic, TT Mus, SZ Nor, BI Pav, BT Pav, HQ Pav, HY Pav, CF Pup, CI Pup, GY Pup, GZ Pup, HI Pup, SV Pyx, TV Pyx, V756 ScoCG Vel, FW Vel, YY Vel, ZZ Vel, W Vol, VW Ant, XX Ant, XY Ant, Y Ant, CD Aps, FY Aps, LO Aps, V843 Aql, MM Ara, V349 Ara, V610 Ara, V620 Ara, AF Cap, DQ Car, DV Car, DX Car, EN Car, FP Car, GP Car, QR Car, PV Cen, V498 Cen, V614 Cen, V742 Cen, V775 Cen, V805 Cen, WZ Cet, AQ Cir, BD Cir, BG Cir, BN Cir, AR CMa, FQ CMa, SZ CMa, SV Col, V412 CrA, AA Cru, BQ Eri, CI Eri, AR Gru, SZ Hor, DZ Hya, FW Hya, RU Ind, FW Lib, FR Lup, FZ Lup, BL Mus, UV Mus, HX Nor, LU Nor, NP Pav, VW Phe, WX Phe, AW Pup, BK Pup, CU Pup, MW Pup, SU Pyx, TX Pyx, TZ Pyx, FU Sco, V385 Sco, V565 Sco, V591 Sco, V606 Sco, V632 Sco, V714 Sco, V885 Sco, V904 Sco, EQ Sct, V356 Sct, V766 Sgr, V2349 Sgr, V2617 Sgr, NS Tel, EM TrA, SS TrA, AQ Vel, DU Vel, DZ Vel, FH Vel, FT Vel, FV Vel, FQ Vir.

Dworak, S.W. 2004, IBVS 5549. (1a) Missing Southern EB: YY Car, BP Car, CD Car, FS Car, GG Car, GV Car, RR Col, RS Crt, AY Mus, SW Nor, SX Nor, TT Nor, UW Nor, VV Nor, CY Oph, V604 Sco, V1108 Sgr, V1721 Sgr, EP TrA, CK Vel. Incorrectly classified variable stars: FL Car, V746 Cen, AW Gru, BF Gru, HH Nor, RU Sex, V1643 Sgr. Incorrectly identified EB: V673 Cen, EV Lup, V3886 Sgr.

Hellier, C., Mukai, K. 2004, MNRAS 352, 1037. (2cx, 5g) Compilation of Fe Kα-line spectra for magnetic CVs. AM Her, EX Hya, AO Psc, GK Per, V1223 Sgr.

Hobbs, G. et al. (15 authors) 2004, MNRAS 352, 1439. (1r) Discovery of 180 pulsars and parameters for 281 previously known pulsars.

Joergens, V., Neuhäuser, R., Fernández, M. 2004, Baltic Astronomy 13, 505. (2aio, 5dk, 9): Brown dwarfs in Cha I.

Kim, D-W, Fabbiano, G. 2004, ApJ 611, 846. (1x*): X-ray luminosity function and total luminosity of LMXB's in early-type binaries (from 985 point-like sources).

Kreiner, J.M. 2004, Acta Astronomica 54, 207. (5b) Up-to date linear elements of EB.

Maciejewski, G., Czart, K., Niedzielski, A. 2004, IBVS 5518. (1a, 6b) New variable stars from SAVS.

Mathias, P. et al. (17 authors) 2004, A&A 417, 189. Multi-site, multi-technique survey of γ Doradus candidates. I. Spectroscopic results for 59 stars. Parameters for double-lined (HD 62454, HD 86371, HD 221866) and single-lined binaries (HD 70645, HD 80731, HD 100215).

Mochejska, B.J. et al. (6 authors) 2004, AJ 128, 312. (1ao, 5b, 6b) Discovery of new variables in field of NGC 2158 (open cluster), including 34 probable EB; period determination.

Otero, S.A. 2004, IBVS 5532. (5b) New elements for 80 EB: CE Cir, V1000 Cen, V920 Her, V1375 Ori, V1384 Ori, V362 Pup, NSV 00763, NSV 01175, NSV 01708, NSV 03489, NSV 03725, NSV 03870, NSV 04226, NSV 04426, NSV 04686, NSV 04711, NSV 04941, NSV 05156, NSV 05177, NSV 05487, NSV 06061, NSV 06091, NSV 06144, NSV 06150, NSV 06208, NSV 06218, NSV 06354, NSV 06488, NSV 06592, NSV 06714, NSV 06746, NSV 06800, NSV 06921, NSV 06933, NSV 07038, NSV 07044, NSV 07763, NSV 07847, NSV 07871, NSV 08564, NSV 09348, NSV 09482, NSV 09948, NSV 10425, NSV 10789, NSV 11114, NSV 11217, NSV 11381, NSV 11425, NSV 11764, NSV 11807, NSV 12215, NSV 12710, NSV 13404, NSV 13527, NSV 13605, NSV 13608, NSV 13711, NSV 13717, NSV 13766, NSV 13890, NSV 14003, NSV 14163, NSV 14164, NSV 14384, NSV 14532, NSV 17233, NSV 17258, NSV 17336, NSV 18132, NSV 18183, NSV 18424, NSV 19453, NSV 19983, NSV 20009, NSV 20245, NSV 20721, NSV 24926, NSV 25992.

Otero, S.A., Dubovsky, P.A. 2004, IBVS 5557. (5b) New Elements for 80 EB IV.: V392 And, LL Aqr, DV Boo, IW CMa, KV CMa, V467 Car, V775 Cas, V454 Cep, DP Cet, MP Del, GZ Dra, V339 Gem, V912 Her, QR Hya, IL Lib, IV Lib, LQ Mus, QT Peg, V365 Pup, AC Pyx, V1044 Sco, PS Ser, V1126 Tau, GZ UMa, PQ Vel, QY Vel, V394 Vul, NSV 00233, NSV 00726, NSV 01403, NSV 02470, NSV 03443, NSV 03728, NSV 04638, NSV 05040, NSV 05914, NSV 06157, NSV 06968, NSV 07178, NSV 07400, NSV 07746, NSV 08499, NSV 10982, NSV 11243, NSV 11781, NSV 12326, NSV 12870, NSV 13121, NSV 13625, NSV 15234, NSV 15375, NSV 15730, NSV 16199, NSV 16296, NSV 17236, NSV 17283, NSV 17436, NSV 17456, NSV 17552, NSV 17578, NSV 17647, NSV 17723, NSV 18104, NSV 18480, NSV 18546, NSV 18553, NSV 18786, NSV 19698, NSV 19703, NSV 19773, NSV 20174, NSV 20433, NSV 20782, NSV 20827, NSV 20894, NSV 20913, NSV 22984, NSV 24620, NSV 25862, NSV 25928.

Petterson, O.K.L., Cottrell, P.L., Albrow, M.D. 2004, MNRAS 350, 95. (2a, 5de, 8c) Orbital elements, absolute dimensions and masses for binary cepheids: Y Car, YZ Car, AX Cir, BP Cir, T Mon, S Mus, W Sgr, V350 Sgr, V636 Sco.

Pikhun, A.I., Andronov, I.L. 2003, OAP 16, 54. (1c) Photographic photometry and minima timings of the eclipsing binaries U Sge and V363 Cyg.

Ramsay, G. et al. (6 authors) 2004, MNRAS 350, 1373. (1aux, 5bcg) *XMM-Newton* observations of 37 polars: J0132-65, J2022-39, EV UMa, J1015+09, J0154.0-5947, FH UMa, CP Tuc, DP Leo, V347 Pav, J1149+28, J0453-42, J1957-57, V834 Cen, EP Dra, J1002-19, CE Gru, J2115-58, MR Ser, ST LMi, AN UMa, EK UMa, WW Hor, AR UMa, EU Cnc, UZ For, J1846+55, J0531-46, V2009-65, J0501-03, J1141-6410, BY Cam, V1500 Cyg, MN Hya, J1007-20, VY For, J1313-32, V895 Cen.

Roberts, T.P. et al. (4 authors) 2004, MNRAS 349, 1193. (1bx, 2d, 5cg) Short-term variability and spectral parameters of probable HMXBs in nearby galaxies: 1C 342 X-1, NGC 3628 X-2, NGC 4136 X-1, NGC 4559 X-1, NGC 5204 X-1.

Schultz, J., Hakala, P., Huovelin, J. 2004, Baltic Astronomy 13, 581. (3ao, 5i): Polarization in LMXBs: V818 Sco (Sco X-1), HZ Her (Her X-1), KV UMa (XTE J1118+480).

Selam, S. O. 2004, A&A 416, 1097. Key parameters of W UMa-type contact binaries discovered by *HIPPARCOS*

Smak, J. 2004, Acta Astronomica 54, 221. (5ij) Enhanced mass transfer in dwarf novae of the SU UMa-type during outbursts and superoutbursts: YZ Cnc, OY Car, Z Cha, VW Hyi, SU UMa.

Solonovich, A.P., Bryukhanov, I.S., Semenyuta, A.S. 2003, OAP 16, 66. (1c, 6d) Searches of the periods and variability type definition of new variable stars: LL Aqr, AL Ari, FM Leo, V1366 Ori, V1125 Tau.

Suchkov, A.A., Hanisch, R.J. 2004, ApJ 612, 437. (1x*, 2x*): Class X automated classifier "detection" of low-luminosity hard x-ray binary candidates from WGACAT.

Tas, G. et al. (11 authors) 2004, IBVS 5548. (5a) Times of minima for EB: ET Boo, DE CVn, KR Cyg, MM Her, FS Leo, RW Tau, V1123 Tau, HD 162905 and HD 170451.

Thorstensen, J.R., Fenton, W.R., Taylor, C.J. 2004, PASP 116, 300. (2aco, 5bd) Spectroscopic orbits and emission-line identification for seven CVs: TT Crt, EZ Del, LL Lyr, UY Pup, RY Ser, CH UMa, SDSS J081321+452809.

Vlemmings, W.H.T., Cordes, J.M., Chartterjee, S. 2004, ApJ 610, 402. (4a) Binary pulsar disrupted by second supernova.

Weldrake, D.T.F. et al. (4 authors) 2004, AJ 128, 736. (1ao, 5b, 6b) Discovery of new variables in field of 47 Tuc, including 28 EB; period determination.

Wetterer, C.J. et al. (9 authors) 2004, IBVS 5547. (1a, 5abc) Preliminary LC solutions for EB: V883 Her, V507 Lyr, MQ Peg, MX Peg, ROTSE1 J180616.31+280109.1.

Woudt, P.A., Warner, B., Pretorius, M.L. 2004, MNRAS 351, 1015. (1ao, 5bce) High-speed photometry of 13 faint cataclysmic variables: V356 Aql, GI Mon, AO Oct, V972 Oph, FH Ser, Aqr1, FIRST J1023+0038, Hα 0242−2802, SDSS 0155+00, SDSS 0233+00, SDSS 1240−01, SDSS 1556−00, SDSS 2050−05.

Yu, W., van der Klis, M., Fender, R. 2004, ApJ 611, L121. (1x) Correlation between of LMXB's peak flux of hard and soft x-rays in outburst rise: V1333 Aql (Aql X-1), 4U 1705−44, XTE J1550−564.

Zola, S. et al. (10 authors) 2004, Acta Astronomica 54, 299. (1ab, 2a, 5cde) V402 Aur, SX Crv, V829 Her, VZ Lib, V753 Mon.

Proceedings of Conferences, Symposia, and Monographs

The Environment and Evolution of Double and Multiple Stars (IAU Coll. 191), eds. *Allen, C., Scarfe, C.D.* 2004, Rev. Mex. Astron. Astrofis. (Ser. Conf.), 21.

IAU Commission 42

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Editor-in-Chief: C.D. Scarfe

Department of Physics and Astronomy
University of Victoria
Victoria, B.C., V8W 3P6, Canada

Phone: +01 250 721-7740
Fax: +01 250 721-7715
scarfe@uvic.ca