

SUBJECT INDEX

Page numbers in **bold type** indicate a review, page numbers in *italic type* indicate that the reference is primarily to a figure or a table.

- Absolute magnitudes 4, 8, 27-28, 291-294, 324, 344, 353-354, 407
- Abundances
accretion column 263-264
accretion discs 248
classical novae 295, 301-302, 304, 307-308, 325, 326, 330
post common envelope binaries 461-462
white dwarf 248, 250
- Accretion
blobby 154, 155, 167, 211
column 11, 150, 171, 223, 263-264
inhomogeneous 156, 162, 165-166
- Accretion disc 5, 6, 7, 8, 10, 13-14, 21, 34, 42, 44, 65, 82, 117-118, 176, 245, 247-248, 250, 335-338, 357, 386, 387, 395
chromosphere 17, 139
circularization radius 116, 159, 163, 205
corona 106, 108, 139, 233, 349, 351, 369
dimensions 97, 98, 426
during outburst 5, 65
eccentricity 50, 52, 115, 127, 131-132
eclipse 35-36, 123
evaporation 81-83
flaring 66, 70, 122
formation 161-164
helium-rich 133-134, 412
imaging of 25-26, 295-298
instability 20, 47, 55, 59, 78, 102-104, 127-130, 130-140, 237, 269, 272, 386, 392, 393, 436
limb darkening 8, 119, 121, 123-124
LMXBs 349, 353, 360
magnetic fields in 101-106, 108, 146, 161-162
mass 135-136
optically thick 8, 17-20, 82, 86, 233, 238-240, 335, 337, 362, 389
optically thin 8, 335, 337, 362, 389
overflow 147, 185-186
partial ionization 105-106
precession 14, 51, 52, 322, 364, 377, 381
pulsations 147
quiescent dwarf novae 81-83, 87-88, 106, 234, 237
radial temperature dependence 5, 15-16, 19, 30-31, 66, 82, 87, 108, 118, 120, 125, 134, 234, 253, 336,
radius 49, 50-51, 52, 66, 69, 83, 132
Reynolds number 99-100, 104, 119, 120, 121, 123
spectra 119-124
steady state 5, 10, 11, 15-16, 19, 30-31, 66, 70, 120, 123, 240, 247, 254
SXT 388-391
tidal instability 50, 52, 78, 115-116, 127-128
truncation of 146, 180, 392
viscosity 29, 66, **97-106**, 107, 119, 213
- Accretion wind 11, 43-44, 118, 119, 233, 234, 240-256, 329-330
- Accretion shock 150, 189, 190, 199, 200, 205, 208, 223, 262, 263, 264
- Accretion stream, in polars **189-198**, 215
- Algol systems 418, 420, 459-460
- AM CVn stars (= double degenerates) 3-4, 131-132
- AM Her stars (see Polars)
- Angular momentum 60, 82, 97
in magnetic CVs **153-160**
- Asynchronous polars 144, 150, 154, 203-204, 215-216, 217
- Atoll sources 355-357, 367
- Bipolar outflows (incl. jets) 332, 333-334, 339, 372, 275
- Black hole
binaries 135-138, 371

- candidates 357, 359, 362, 372, 395
 masses 138, 387, 389, 391-392, 396
 in SXT 385-389, 423
- Boundary layer 36, 82, 113, 251, 267,
 269, 272, 273, 335-338
- Bright spot 6, 7, 8, 10, 15, 26, 29, 34,
 35-36, 42, 49, 65, 69, 77, 112,
 125, 175, 178, 233, 252, 357,
 395, 397, 425
- Classical novae 7, 90, 91, **281-287**, 418,
 420, 422, 438-440, 463-464
 aspherical shells 307-310, 313-320
 coronal phase 284, 326
 DQ Her types 323-324
 dust formation 282, 307, 309, 325-
 326
 ejected envelope 329-330
 ejected mass 304, 318, 320, 330
 ejected shell 305-314, 317-320, 325-
 326
 envelope mass 281, 283, 303
 extragalactic 289, 291-294, 295
 eruptions 60, 248, 281, 307-308, 447-
 448, 457
 γ -ray emission 303-304
 giant secondary 283, 284
 model atmospheres 295-298
 rates 291-294
 shell mass 302, 305-306
 surveys 289, 291-294, 309-310
 synthetic spectra 295-298
 TNR 281-282, 286, 299-300, 301, 303-
 304, 308
 X-ray emission 284-286, 289
- Colours
 optical 13-14, 73-74, 79-80, 89, 209-
 210, 219-220, 323, 337, 410
 ultraviolet 240, 285
 X-ray 274, 350, 355-357, 363-364
- Common envelope 344, 408, 411, 418,
 433, 434, 435, 439, 445, 453-
 458, 459, 461
 in classical novae 282-283, 306, 439,
 447
 post common envelope 457-458, 461-
 462, 463-464, 467
- Corona 82, 83, 236, 237, 269, 272, 357
- CVs
 evolutionary status 85, **433-442**, 469-
 470, 473-474
 formation rate 434
 progenitors **433-442**, 443-448
 secular evolution 447-452
- Cyclotron radiation 189, 190-191, 193,
 195, 199, 201, 203-204, 230, 264,
 357
- Distances 4, 27-28, 66, 121, 238, 239,
 240, 251-252, 271, 324, 372, 373,
 404, 426, 472
- Doppler mapping 41-42, 71-72, 158, 163,
 178, 198, 395-398
- Double degenerates (see AM CVn stars)
- DQ Her stars (see Intermediate polars)
- Dwarf novae 4, 7, 11, 327, 386, 436
 in outburst 5-7, 10, 11, 14, 29, 35-
 36, **45-54**, 63-70, 71-72, 75-76,
 79-80, 100, 107-108, 111, 113,
 127, 135, 136, 138, 249, 266-
 267
 in quiescence 5, 7, 35-36, 79-80, 81-
 88, 234-238, 247-252, 269-272
 oscillations 146
 period distribution 436-438
- Eclipse mapping 5, 6, 8, 17, 18, 29, 30,
 34, 125-126
- Eclipses 7, 10, 17, 18, 29, 33-34, 91, 173-
 176, 179-180, 195, 196, 269-272,
 327, 336, 343, 351, 471
 of disc/spot 29, 35-36, 49, 253-256,
 327
 during outburst 65-70
 primary 3-6, 9, 15, 35-36
- Eddington limit 281, 283, 289, 324, 336
- Ejector systems 147, 153, 157, 158-159,
 165-166
 evolution 163-164
- Ellipsoidal variations 21, 351
- ER UMa types 59-60, 128, 129, 130
 evolutionary status 59-60
 orbital periods 60, 128
- Flares 165-166, 167, 209-210, 353, 401-
 402, 403
- Flickering 6, 20, 29-32, 33-34, 35-36, 89,
 106, 108, 151, 211-212, 221-224,
 340, 341-342, 395, 427, 428
 spectrum of 31-32, 221-222
- Gravitational drag 313
- Gravitational radiation 46, 47, 60, 350,
 433, 434, 453, 474
- Gravitational redshift 352
- Halo objects 27-28, 91
- Hibernation model 11, 60, 91, 327-328
- Hot spot (see Bright spot)
- Inclination 4, 7, 8, 9, 15-16, 55, 65, 75,
 171, 192, 195, 197, 239, 253,
 254, 272, 275, 311, 330, 344,
 350-351, 358, 396, 399-400, 425,
 426, 471

- Intermediate polars (= DQ Her stars) 3-4, 90, 103, 117, **143-152**, 157, 161-164, 169-172, 274, 352, *438*, 443-444
 spin rates 159-160
 X-ray spectra 149-150, 260-266
- Irradiation 6, 7, 10, 21, 23, 24, 48, 49, 51, 53, 75, 206, 209, 211, 227, 228, 237, 246, 251, 262, 282-283, 327-328, 346, 349, 370, 377, 381, 386, 425, 438, 441, 449-452
- Isotopic ratios 455-458
- Jets (see Bipolar outflows)
- Low mass X-ray binaries (LMXB) **349-358**, 378, 439-441, 449
 bulge sources 350, 352, 353, 365-366
 burst sources 350
 evolution **433-442**
 period distribution *440*
 radio emission 372-373
 secondary 349
 X-ray spectra 352-353
 Z sources 350, 353-354, 367
- Magnetic braking 11, 350, 433, 435, 443-444, 445, 451, 453
- Magnetic dynamo 101, 103
- Magnetic fields
 as cause of accretion disc viscosity 101-106
 in intermediate polars 146
 in polars 146, **189-198**
- Mass accretion rate 5, 10, 16, 19, 55, 111, 271, 337, 338, 358, 378, 387-388, 391, 392, 422, *426*
- Mass ratio 52, 66, 76, 116, 127, 132, 157, 158, 254, 358, 396, 434, 435, 448, 468, 471
- Mass transfer rate 8, 10, 11, *28*, 45, 46, 47, 48, 49, 50, 51, 52, 59, 60, 66, 75, 77, 78, 116, 129, 139, 157, 386, 434, 448
- Neutron stars 156, 161, 349, 371, 423
 formation 409-410
 magnetic field 354, 357, 358, 377, 404
 mass 352, 473,
 spin period 354-355, 356, 377, 381
 in SXT 385-386
- Non-CVs 89-90, *94*
- Non-magnetic systems 1-94, 161, 266-267, 269-272, *437*, *438*
- Nova-like variables **3-12**, 13-14, 42-45, 59, 129, 131, *438*
 light variations 6, 13-14
 period distribution 5, 60, 436-438
- Orbital periods 3, *27-28*, 41-44, 57, 61, 71, 76, 77, 79, 86, 90, 115, 116, 117, 131, 132, 158, 162, 177, 209, 213, 215, 225, 229, *276*, 321-322, 327, 335, 336, 342, 343-344, 386, 395, 396, 420, *422*, 423, *426*, 435, 459-460, 461, 465, *467*, 471, 473, 476
- AM CVn stars 131-132
- CV progenitors *446*, 456, 465, *467*
 distribution 4, 10, 11, 60, 324, 419, 421-422, 435, *440*, *468*, 475-*476*
- dwarf novae 5, 86
- intermediate polars 143
- nova-likes 5-6, 8
 - P_{spin} relation 143-145, 157
- SW Sex stars 9
- symbiotics 335, 336, 345
- X-ray binaries 350, 354, 365, 369, *372*, *373*, 377, 381, 395-396
- Parker instability 103-106
- Period gap 5, 11, 55, 58, 59, 60, 127, 129, 130, 433-440, 452, 466
- Permanent superhumps 59, 89, 90, *128*, 129
- Planetary nebulae 418, 420, 453, 456
- Polar systems (= AM Her stars) 3-4, 48, 90, 145, 146, 150, 151, 183, **189-198**, 199-204, 257, 260-266, *438*, 439
- Polarization 181-182, 189, 192, 204, 209-*210*, 216, 227, 315-316, 371
- Population studies 89-92, 291, 294
- Post common envelope binaries 91, 431-476
- Primary star (see Black hole, Neutron star, White dwarf)
- Propeller action 339-342
- Pulsars 353, 357, 381, 404, 440, 460, 473-476
- Quasiperiodic oscillations (QPOs) 6, 7, 19, 20, 186, 217-218, 223-224
 in LMXBs 354, 355-357, 358
- Radial velocity variations 9, 21, 22, 56, 58
- Radio emission 167-168, 317-320, 333-334, 371-376, 413
- Recurrent novae 289, 331-332, 340
- Roche lobes 23, 72, 97, 157, *159*, 346, 349, 400, 401-402, 412, 425
 overflow 301, 417, 425
- Rotational disturbance 179-180

- RZ LMi stars 129
- Secondary star 6, 10, 11, 13-14, 21-24, 29, 48, 71-72, 76, 80, 115, 127, 227-228, 327, 349, 395, 396
- giant 283, 284, 331, 335, 343
- mass 24, 117, 151-152, 228, 336, 344, 426, 472
- spectral type 328, 336, 341, 366, 369-370, 395, 463, 472
- Space densities 4, 27, 90, 435
- Space observations
- ALEXIS 257-258
- ASCA 73-74, 150, **259-268**, 269-272
- COMPTEL 277-278
- EUVE 243-246
- Ginga 213-214
- HUT **233-241**
- HST 17-20, 31-32, 43-44, 165-166, 169-176, 223-226, 247-250, 253-356, 329-330
- IUE 55-58, 133-134, 251-252
- ROSAT 165-166, 211-214, 273-276, 289, 423-424
- WUPPE 315-316
- Secular light variations 33-40, 61-62, 185-186, 219-220, 357-358, 424
- Supercycles 55, 129
- Superhumps 49, 51, 53, 58, 61-62, 77-78, 116, 127, 131, 321
- period 58, 61, 115, 132, 322
- Supermaxima 35-36, 56
- Supernovae 314, **407-415**, 440
- progenitors **407-415**, 440
- Superoutbursts **45-54**, 51-52, 55, 56, 59, 61-62, 77, 78, 129, 131, 243-246, 247, 249, 252, 257-258, 322, 357, 386, 392
- Supersoft X-ray sources 289, 407, 413, 417-429
- SU UMa stars 4, 46, 48, 50, 52, 53, 55-56, 58, 59-60, 77-78, 79, 115, 127, *128*, 129, 130, 131, 274, *275-276*, 321-322, 392
- SW Sex stars 3-10, 90, 91
- SXT (see transients)
- Symbiotic systems 112, 332, 333-334, 412, 413, 418, 419, 420, 421-422
- outbursts 335-338
- Synchrotron radiation 371, 390
- Thermonuclear runaway (TNR) (see also Classical novae) 335, 336, 352, 407, 408, 438
- TOADs 46, 64
- Tomography 10, 11, 21-24, 25-26, 71-72, 158, 163, 178, 198
- Transients
- EUV 257-258
- X-ray 277-278, 350, 371, 375
- soft X-ray (SXT) **385-394**, 418
- U Gem stars 4, 47, 65-70, 71, *128*
- UX UMa stars 3-4, 8, 10, 274, *275-276*
- Viscosity 19, 29, 45-47, 50, 66, **97-106**, 136, 388, *389*, 390, 391
- α prescription 98-100, 107, 108, 109-114, 120, 129, 136-137, 387
- timescale of viscous processes 98, 113, 156, 159
- turbulent 98-100, 109-110
- VY Scl stars 3-6, 8, 10, 11, 131, 274, *438*
- White dwarf 7, 24, 25-26, 29, 35-36, 65, 69, 60, 82, 97, 118, 122
- composition 301-302, 303, 308, 407, 409, 467
- cooling 251-252
- DA 86, 249-250
- DB 86, 134, 470
- heating of 47, 48, 206
- magnetic field 155, 160, 168, 181, 183, 193, *194*, 195, 199-202, 203-204, 264, 321, 339, 341, 342, 438
- magnetic moment 160, 162, 163, 165-166
- mass 60, 76, 82, 90, 117, 120, 134, 151, 169, 171, 200, 228, 236, 239, 251, 263-264, 271, 284, 286, 306, 344, 418, 419, 422, *426*, 427, 461, *467*
- radius 82, 120, 236, 252
- spin 153, 163, 169, 177-178, 181, 185, 215, 217
- supernova progenitor 407-408
- temperature 81-83, 85-86, 134, 193, 235, 237, 247-248, 250, 252, 254, 461
- Wind accretion 339, 341-342, 346, 417, 419
- Winds 43-44, 82, 413, 434, 443
- WZ Sge stars 52, 77-78, *128*, 129
- X-ray binaries 277-278, 359-362, 371-374, 337-380
- X-ray dips 350, 351-352
- X-ray novae 135-138, 139-140, 237, 386, 399-400
- X-ray spectra 205-208, 352-353
- Z Cam stars 4, *128*, 274, *275-276*
- Z sources 350, 353-357, 363, 365-366, 367, 371