

INDEX OF SUBJECTS

- accretion disk 174
- angular momentum loss 159
- asteroids 200-221, 285
  - collisional evolution 214
  - IR-radiometry 216
  - polarimetry 216
  - pole determination 218
  - rotation 217
  - spectrophotometry 215
  - UBV-photometry 216
- astrometry 313
  - comet 224, 271, 285
  - reductions 285
- asteroseismology 251
- Astronomical Data Center 321
- Babinet compensator 105
- binaries
  - apsidal motion 319
  - circularisation 394-397
  - close 303
  - contact 159, 295
  - eccentricity 394
  - eclipsing 261, 299-306, 463
  - interacting 173
  - mass transfer 174, 289, 299, 397
  - spectroscopic 393, 447
  - visual 396, 425, 441
- Bok globules 257
- catalogs, machine-readable 321
- CCD
  - detectors (see detectors, CCD)
  - fluorescent coatings 355
  - GEC 350-351
  - photometry 33, 277-282
  - readout noise 285
  - RCA 351
  - scanning 285
  - Tektronix 19-28, 351, 355
  - TI 351
  - uv-flooding 351
- circumstellar shells 139, 149
- computers
  - DEC micro/PDP-11 110
  - image processing 100
  - microprocessor architecture 461
  - workstations 27
- comets 207
  - coma 208
  - International Halley Watch 271
  - p/Halley 75, 113, 223, 271
  - photometry 223, 313
  - short-term variability 226
  - spectroscopy 215, 224
- CORAVEL (see radial velocities, CORAVEL)
- dark noise 72, 285
- detectors 403, 409
  - CCD 19-28, 85, 89, 99, 111, 145, 265, 285, 350, 364, 373, 380, 403, 439, 457, 459
  - cooling 458
  - image tube 373, 378
  - intensified scanners 346ff, 453
  - micro-channel plate 72, 79, 451
  - quantum efficiency 403
  - Reticon 69, 79, 89, 364, 403ff, 449ff
  - Shectograph 364, 461
  - two-dimensional photon-counting 349
- evolution
  - chemical 138, 143
  - galactic 141ff, 413
  - stellar 136, 413, 425
- extinction
  - interstellar 149
  - atmospheric 262, 303
- Fabry-Perot etalon 459
- Fourier transform 408
- galactic nucleosynthesis (see also evolution) 139
- galaxies
  - early-type 277
  - morphological classification 243, 277
  - radial density profiles 243
  - surface photometry 100, 243, 277ff

- Hamamatsu photomultiplier 57  
 high instrumental transmission 431
- imaging  
 CCD 224  
 direct 24, 69, 89  
 infrared 325  
 maximum-entropy 275  
 photon counting 71
- infrared arrays 30, 325
- local thermodynamic equilibrium 413
- magnetic wind braking 159
- measuring machines 65
- minor planets  
 radar studies 202  
 satellites 203
- mirror  
 honeycomb 93  
 primary 93, 121  
 secondary 121  
 Zerodur 103
- Nyquist frequency 408
- objective prism 247
- occultations 187, 199  
 angular diameters 187, 194, 204  
 comets 207  
 diffraction 187, 204  
 lunar 204  
 lunar limb irregularities 187*ff*  
 Neptune 208  
 predictions 209  
 rotation of lunar nodes 189  
 timings 187*ff*  
 working group 209
- Offner compensator 102
- optical fiber (see also spectro-  
 graph, fiber-fed; photometer,  
 fiber-optic) 61, 81, 115,  
 379, 448*ff*, 459
- parallaxes  
 Barnard's star 292  
 photometric 248, 425  
 trigonometric 291
- photographic  
 monitoring 269  
 plate 364
- photometer 81, 91, 119  
 computer-controlled 79, 119  
 fiber-optic 61, 81  
 multi-channel 61, 81, 109  
 offset-guiding 110  
 scanning 261  
 Texas 110
- photometry (see also CCD; comets;  
 extinction; galaxies) 57, 110  
 area 53  
 bright stars 241, 317  
 catalog 317  
 DDO 142  
 faint star 38  
 Geneva system 139, 143, 273  
 H-alpha 90  
 high resolution 43  
 high speed 42, 110  
 intermediate-bandwidth 136, 261  
 K-line 48, 52  
 occultation 187  
 pulse counting 241, 303  
 standards 37, 313, 317  
 stellar 33, 135, 144  
 transformation 58  
 UBVRI 57, 61, 69, 89, 135*ff*, 182  
 261, 275, 281, 309  
 uvby $\beta$  136, 143, 183, 261, 265, 317  
 variable stars (see also variable  
 stars) 109, 307, 429  
 Walraven 137
- photon statistics 431
- polarimetry (see stars, polarimetry)  
 polarisation 5, 257  
 linear 149
- program  
 coordinated 69, 224  
 multisite 251  
 radial velocity (see also radial  
 velocities) 459  
 research 65, 238  
 survey 89, 243  
 proper motion 144
- radial velocities (see also  
 programmes; spectrometer)  
 CORAVEL 184, 273, 385, 441  
 measurements 9, 143*ff*, 183, 273,  
 371, 379, 385  
 standards 437  
 studies 437

- radiometric size determination 201
- Reticon (see detectors, Reticon)
- seeing noise 188
- solar neighborhood 141
- solar oscillations 431
- Southern Reference Stars 103
- space satellites
  - astronomical 323
  - EXOSAT 69
  - HIPPARCOS 144, 192
  - IRAS 257
  - IUE 69, 176
  - Hubble Space Telescope 144, 192
- speckle interferometry 192
- spectral classification (see also spectrograph, classification)
  - 69, 89, 359, 439, 463
  - HD catalog 144
  - low dispersion 359
  - MK system 359, 463
- spectrograph 443
  - camera 403ff
  - cassegrain échelle 371
  - classification 69, 89
  - collimator 402ff
  - coudé 115, 404ff
  - échelle 25, 69, 89, 115
  - entrance slit 402ff
  - fiber-fed 371, 380
  - galaxy 26
  - grating 402ff
  - image-slicer 404ff
  - resolving power 372
- spectrometer
  - fast-grating 439
  - four-channel 75
  - H-alpha 457
  - photon counting 461
  - radial velocity 9, 75, 425, 437 447
- spectrophotometry (see also asteroids; comets) 461
  - low dispersion 453
  - stellar 453
- spectroscopy
  - astronomical 451
  - cross correlation techniques 385
  - curve-of-growth 414
  - diurnal rotation 404
  - heterodyne 431
  - high resolution 115, 402ff, 414 431, 443
  - line blending 408
  - low resolution 345, 439
  - microscanning 409ff
  - signal-to-noise ratio 403ff
- spectrum scanners 75
- star clusters 141, 426
  - abundance gradient 138
  - associations 137ff
  - bimodal main sequence 139
  - globular 141, 281, 287
  - luminosity function 138, 141
  - mass function 138
  - membership 447
  - moving groups 141
  - open 138, 394
  - velocity dispersion 447
  - very young 95, 137
- stars (see also evolution, stellar)
  - abundances 386, 413
  - active regions 142, 293, 309
  - age-metallicity relation 143
  - B-subdwarf 305
  - BaII and CH 447
  - brightness 449
  - convection 395, 449
  - Doppler effect 402, 459
  - double and multiple 187, 190, 393, 441
  - energy distributions 453
  - extended atmospheres 95, 149
  - F,G and K type 402
  - formation 136-139, 143, 325
  - giant 52, 195, 283, 394, 413, 449
  - H and K emission 283
  - late-type dwarf 394, 413
  - late-type giant 395, 413
  - line profile 401, 409, 457
  - lower main sequence 394
  - magnetic 149
  - mass 426
  - nearby 247
  - polarimetry 53, 95, 105, 257
  - pre-main sequence 443
  - rotation 95, 283, 386, 402, 443
  - starspots 195, 275, 293, 328
  - stellar populations 136, 141, 413
  - structure 136
  - supergiants 386, 394ff, 449
  - supergranules 450

- temperature 449
- time variability 401, 443, 453
- turbulence 386*ff*, 402
- white dwarf 142, 195
- starspots (see stars, starspots)
- Stokes parameter 105
- telescopes
  - alt-az mounting 93
  - astrometric 113, 292
  - automatic 47, 83*ff*
  - automatic photoelectric (APT)
    - service 48*ff*, 87, 145, 241
  - Baker-Nunn 85
  - cassegrain 91
  - cost effectiveness 3, 10-13, 238
  - Dall-Kirkham 101
  - flip-flop top ring 93
  - ground-based 323
  - guiding and finding 121
  - Nasmyth focus 93
  - Newtonian focus 285
  - patrol 85
  - Schmidt 85
  - seeing limited 315
  - space-based (see satellites)
  - subscription rates 237
  - transit circle 103
  - upgrade 117
  - wide-angle cameras 65
- telescope sites
  - Black Birch Astrometric
    - Observatory 103
  - Bosscha Observatory 303
  - Capillo Peak Observatory 99
  - Cerro Tololo Inter-American
    - Observatory 349
  - David Dunlap Observatory 69, 79
  - Fick Observatory 75, 437
  - Grant O. Gale Observatory 79
  - Kagoshima Space Center 111
  - Kitt Peak National Observatory 348
  - Lick Observatory 346
  - Mt Hopkins 48, 50
  - Mount John University Observatory
    - 101, 262
  - Mt Stromlo Observatory 291
  - South Pole 83
  - Sydney Observatory 271
  - University of Toronto Southern
    - Observatory 69, 89
- television viewing 19, 29, 79
- Uranian rings 208
- variable stars
  - acceleration 387
  - Algols 176, 301
  - $\beta$  Lyrae 301
  - Baade-Wesselink method 273, 387
  - Be stars 173, 457
  - cataclysmic 7, 90, 174, 289
  - cepheids 40, 90, 143, 195, 273
    - 307, 389
  - common envelope 305
  - $\delta$  Scuti 273, 392
  - DB white dwarf 6
  - EX Hydrae 289
  - evolution 305
  - flare stars 69, 195
  - Herbig 443
  - light curves 262, 307
  - Maganellian Clouds 390
  - mean radius 387
  - Miras 90
  - monitoring 255
  - nonradial pulsation 149
  - oscillations 251
  - period changes 179, 269, 295, 301
  - period-radius relation 273
  - periodic 297
  - phase 297
  - photometry (see photometry)
  - population II cepheids 273
  - pulsational velocity 387
  - RR Lyrae 41, 195, 269, 273, 287,
    - 391
  - RS CVn 47, 100, 195, 275, 293,
    - 309, 327
  - radius variations 387
  - rapidly oscillating Ap stars 8,
    - 251
  - Roche lobe 395
  - shell stars 173
  - spectroscopy (see also spectroscopy) 429
  - SX Phoenicis 273, 392
  - survey 90, 269, 287
  - T Tauri 90
  - times of minima 301, 319
  - W Serpentis 181*ff*
  - W UMa 301