

SUBJECT INDEX

- Angular diameters **435–447**, 448–451
- Angular momentum 134, 135, 137–139, 142, 143, 287, 291, 292–294, 297, 298, 312, 342, 347, 369, 400, 401, 475, 476, 485, 488
- A stars 173, 303, 492, 538
- Ap stars 153, 154, 159, 160, 173, 182, 303, 333
- Asteroseismology 16, 43, 104, 110
- Atomic data 335–338
- Balmer decrement 378, 396
- Be stars 62, 64, 65, 76, 78, 86, **89–99**, 102, 104, 153, 158, 159, 162–164, 173, 174, **179–181**, 182, 183, 187, 188, 190, **194, 195**, 196, 202, 204, 206, 208, 211, 213, 217, **218–224**, 226, 227, 232, 234, 236, **241–253**, 254, 259, 261, 263, 267–277, 280, 282, 284, **287–298**, 299–309, **311–324**, **341–350**, 351–386, **399–411**, 412–426, **436–445**, 462, 464, **475–488**, 496, 527, 532
- Be star frequency 356
- Be/X-ray binaries 204, 206, 208, 211, 213
- B[e] stars 394–397, 473
- Binaries 3, 8, 10–12, 25, 43, 51, 98, 204, 206, 208, 211, 247, 250, 282, 325, 327, 342, 344, 345, 370, 372, 374, 405, 408, 411, 434, 435, 439, 443, 446, 487
- Blue stragglers 303
- Bp stars 153, 165, 180–182, 184, 320
- Cepheids 51
- β Cephei stars 3, 4, 6, 7, 9–11, 13–15, 17, 19, 21, 23, 25, 27, 29, 31, 55–57, 60, 62–66, 70, 76, 80–82, 85, 86, 161, 164, 187, 188, 190, 192, 287–289, 301, 313, 320
- Circumstellar disks 96, 98, 158, 159, 213, 218, 220, 224, 230, 242, 253, 289, 290, 312, 314, 380, **399–411**, **341–350**, 397, 418, 425, **435–447**, 448–451, **475–488**
- Circumstellar envelopes 171, 351, 358, 366, 368, 370, 372, 376–378, 384–395, 422, 425, 431
- Classification 263, 275, 277
- Continuum spectrum 259, 362, 366, 418, 422, 425, 427, 429
- Convection 58, 60, 64, 67, 118, 119, 125, 132, **133–138**, 140, 142, 143, 174–176, 180, 181, 314, 315
- CP stars 43, 167, 171, 173, 174, 176, 179–181, 183, 337
- Differential rotation 125, 126, 142, 143, 175, 176, 257, 292, 321
- Discrete absorption components (DAC's) 161, 194, 221–223, 225, 227, 376, 460–462, 465, 500, **507–516**, **517–529**
- Doppler imaging 43, **78–79**, 85, 86, 91, 98, 183, 252
- Dust 394, 397, 431
- Dynamo theory 65, 173, **174–176**, 179, 180, 182
- Emission lines 259, 261, 263, 396, 414, 420, 522–525, 532
- Fe II lines 234, 263, 265, 267, 358, 366, 375, 412
- Global disk oscillations 376, 380–385
- $H\alpha$ 85, 157, 158, 160, 161, 164, **199–200**, 221, 222, 224, 227, 234, 242, 243, 247, 253, 254, 257, 269, 272, 289, 298, 324, 341–343, 346, 350, 354, 382–385, 405–407, 450, 462, 484, 485, 522–525, 538
- $H\beta$ **95–96**, 232, 309, 376, 538
- $Br\alpha, \gamma$ **400–401**, 420
- HdBe stars 329–332
- He lines 41, 100, 112, 259, 261, 273, 353, 3364, 68
- He peculiar stars **155–166**, 167, 169
- Herbig Ae/Be stars 386–393, 505
- Hydrodynamics 119, 125, 192, 194, 476, **480–481**, 508, 509
- Infrared photometry/spectroscopy 396, **400–408**, 410, 412–421, 494

- Instability 69, 70, 73, 128, 494, 498
 Interferometry 6, 182, 247, 283, 314, 347, **435–447**, 448–451, 466, 503
 κ mechanism 29, 128
 Light curves **3–7**, 9, 13, 31, 43, 95, 99, 287–290, 292, 298, 312, 315–319, 321, 322, 324
 Line formation 378, 382–385, 470, 496–503
 Line profile variations 5, 6, 11–13, 53, **75–86**, **89–99**, 100, 106, 108, 110, 112, 114, 124, 127, 164, 241, 242, 251, 287, 289, 290, 292, 312, 314–320, 322–326, 364, 368
logg determination 43, 331, 362, 427
 Luminous Blue Variables 73, 397, 532
 Magellanic Clouds 29, 269, 271
 Magnetic fields **153–164**, 167, 169, 171, **173–183**, 185, 194, 196, 241–243, 245, 250, 252, 253, 287, **291–292**, 312, 319, 321, 341, 367, 460, 462, 464, 465, 475, 485, 488, 512, **517–529**
 Magnetic patch model **524–529**
 Mass loss 89, 95, 96, 114, 131–133, **134**, 135, **137**, 138, **139–140**, 143, 161, 167, 187, 192, 194, 196, 224, 280, 287, 291, **292–295**, 312–315, 319, 324, 341–343, **404–405**, 406, 410, 455, 457–459, 464, 475, 482–488, 508, 516, **517–529**, 532
 Metal abundances 29, 58, 60, 62, 66, 132, 149, 154, 155, 157, 159, 163, 303, 312, 314, 320, 427
 Mid-B variables 4, 5, 6, 10–14, 55, 62–66, 76, 82, 99, 287, 288, 314, 320, 321
 Mode identification **6–7**, **75–86**, **89–99**, 97, 98, 318
 Multiperiodic pulsations 21, 23, 25, 33, 43, 102, 110, 325, 364, 369
 Multisite observations 33, 39, 49, 110, 282, 284, 360, **517–529**
 Multiwavelength observations 17, 37, 206, 282, 284, 360, **517–529**
 Nonadiabatic observables 15, 17
 Nonradial pulsations 33, 37, 41, 87, **89–99**, 100, 104, 106, 112, 114, 261, 284, 307, **311–324**, 325, 364, 369, **517–529**
 Opacities 19, **55–66**, 67, 69, 70, 82, **135**, **136**, 138, 143, 180, 181, 220, 224, 226, 288, 289, 292
 Open clusters 10, 11, 29, 30, 49, 65, 66, 135, 151, 269–272, 303, 309, 320, 389
 O stars 112, 114, 139, 145, 187, 188, 190, 192, 200, 217, 225, 315, 427, 459, 481, 494, 498, 500, 507, 509, 510, 512, **517–529**, 532
 P Cygni profiles 496, 498, 500, 502, **517–529**
 Period changes 21
 Periods and period finding **3–6**, 12, 13, 78, 79, 85, 90–92, 102, 112, 114, 288–290, 312, **316–318**, 344–347, 364
 53 Persei stars 4, 5, 6, 10–14, 33, 37, 39, 55, 62–66, 76, 82, 99, 287, 288, 314, 320, 321
 Phase changes 351–365
 Polarization **219–229**, 230, 232, 234, 236, 355, 366, 394, 448, 450, 473, 530
 Pulsation – see also: Line profile variations, Multiperiodic, Nonradial, Rotation
 Pulsation constant **3,4–7**, 10, 75, **76**, 86
 Radial velocity 4, 13, 62, 91, 94, 97, 98, 247, 289, 307, 312–323, 343–347, 371, 462
 Radiation force 287, 297, 402, 406–408, 411, 455, 476–479, 485, 487–493, 508, 512
 Radio emission 211, 418, 429
 Rotation and magnetic fields 173, 175–177, 180, 184, **517–529**
 Rotational modulation 4, 92, 93, 95, 98, 246, 289, **311–324**, 284, 284, 287, 462, 507, 508, **509–512**, **517–529**, 537
 Rotation and pulsation 4, 43, 47, 64, 65, 75, 78–80, 83, 86, 87, 98, 114, **117–127**, 128, 289, 292,

- 517–529**
- δ Scuti stars 47, 49, 56, 63, 110, 312, 313
- Shell stars 351–377
- Shocks 19, 432, 500
- Si stars 43, 155
- Slowly-pulsating B stars 4, 5, 6, 10–14, 41, 43, 55, 62–66, 69, 70, 76, 82, 99, 287, 288, 314, 320, 321
- Stark broadening 335–338
- Stellar activity 62, 64, 65, 226, **241–253**, 316, 317, 321, 341, 347, 511, 512
- Stellar evolution 51, 67, **131–144**, 145, 147, 149, 151
- Stellar flares 180, 194, 242, **246–247**, 250, 253
- Stellar rotation 147, 151, **131–144**
- Stellar spots 4, 76, 93, 95, 225, 242, 245, 246, 289–292, 312, 316, 319, 322–324, **517–529**
- Stellar winds 89, **96**, **157–159**, 163, 173, 178–180, 182, 183, 187, 188, 192–194, 196, 197, 202, **221**, **222**, 223–225, 227, 247, 267, 287, 295, 319, 323, 324, 342, 350, 401, 402, 404, **406**, 408, 411, **455–466**, **475–488**, 492–495, 500, **507–516**, **517–529**, 532–539
- Surface mapping 43
- Ultraviolet observations 89, 91, 94, 95, **96**, 99, 157, 158, 194, **218–222**, 224–227, 244, 247, **248–250**, 253, 267, 275, 277, 280, 284, 287, 290, 318, 323, 324, 342–344, 360, 366, 370, 376, 402, 404, 405, 460, 461, 484, **507–516**, **517–529**, 534
- Veiling 259, 261
- V/R variations 366, 372, 376, 380, 382, 384
- Wind compressed disk model 194, 222, 224, **406**, 407, 408, 462, 465, 469, 470, **475–488**
- Winds and magnetic fields **157–159**, 163, 173, 178–180, 182, 183, **517–529**
- Wolf-Rayet stars 53, 329, 479, 506
- X-Ray binaries 204, 206, 208, 211, 213
- X-Rays **187–197**, 200, 202, 204, 206, 208, 211, 213, 221, 225, **246–250**, 252, 253, 345, 405, 408, 411, 461, 483–485