

## Subject Index

- 30 Doradus, 213, 222, 227, 243, 245, 247, 249, 366
- absorption lines, 21, 56, 154  
abundances, 116, 118, 132, 200, 208, 241, 259, 266, 275, 277, 279, 282, 332, 368, 397, 438, 501
- abundance gradients, 397
- AGB stars, 324, 328, 370, 372, 374, 383, 385, 387
- age-metallicity relations, 397
- ages, 292, 397, 405, 431, 438, 446
- astronomical designations, 17
- atoms, 128
- bar, 470
- barred galaxies, 349, 458
- binary orbit, 499
- binary stars, 181, 239, 381, 462, 513, 563
- blue stragglers, 450
- carbon, 56, 372, 374, 381
- carbon stars, 324, 328, 387
- cataclysmic variables, 391
- catalogs, 237, 523
- Cepheids, 470, 513, 523, 527, 534, 542, 559, 561
- chemical evolution, 208, 351, 357
- circumstellar matter, 134, 136, 387, 549
- close encounter, 499
- clouds, 112, 114, 160
- cluster formation, 61, 434, 499
- cluster pairs, 440
- clusters, 61, 292, 383, 434, 559
- CO, 21, 61, 67, 120, 124
- color functions, 345
- color-magnitude diagrams, 299, 343, 438, 559
- compact HII regions, 377
- database, 460
- depth structure, 389
- diffuse emission, 32
- diffuse gas, 158
- distance, 527, 534, 542, 549, 563
- distance indicators, 527
- distance modulus, 563
- distance scale, 534, 542, 549
- dithering, 359
- dwarf galaxies, 462
- dynamics, 492, 508
- early type, 237
- eclipsing binaries, 513, 563
- El Enano, 99
- emission-line stars, 95
- evolution, 275, 306, 341, 372, 374, 379, 381, 466
- field stars, 448
- filtering, 359
- formation, 245, 450
- formation histories, 397
- fragmentation, 106
- fundamental parameters, 561, 563
- Galactic halo, 480, 508
- galactic halos, 56, 506
- galaxies, 78, 128, 128, 145, 168, 168, 168, 187, 187, 245, 368, 368, 374, 385, 450, 452, 549
- galaxy evolution, 341
- galaxy interactions, 480, 492, 508
- Gamma-ray bursts, 422
- giant molecular clouds, 130, 148
- globular clusters, 417, 438, 448, 450, 460
- H $\alpha$ , 95, 99
- helium-shell flash, 370
- Hess diagrams, 320
- HII, 45, 51, 101
- HI line, 112
- HI shells, 106
- high resolution images, 122
- high resolution spectroscopy, 241
- high-velocity clouds, 501, 503, 506
- HII regions, 128, 130, 132, 143, 152, 165, 227, 249, 266, 282
- hot gas, 56
- hot stars, 132, 241
- HR diagram, 374, 466
- HST, 357, 460

- IAU, 17  
image analysis, 359  
initial mass function, 254  
instrumentation, 21  
interactions, 405  
interstellar bubbles, 37, 78, 134, 152, 158  
interstellar matter, 56, 277, 422, 506  
ionized gas, 21  
ionization, 84  
IR, 67, 110, 213, 245, 377, 387  
IR spectroscopy, 247  
IRAS, 122  
irregular, 168  
ISM, 8, 21, 37, 45, 78, 84, 110, 112, 114, 116, 118, 120, 124, 126, 128, 141, 143, 145, 152, 154, 156, 160, 168, 187, 227, 245, 275, 389, 501  
isochrone probability functions, 345  
kinematics and dynamics, 37, 145, 152, 156, 160, 299, 492, 508  
late type, 368  
LBV nebulae, 134  
leading edge, 456  
lines, 110  
LMC, 37, 84, 99, 130, 145, 148, 150, 152, 154, 213, 243, 282, 306, 343, 347, 349, 351, 361, 368, 410, 422, 434, 440, 499, 517, 534, 559  
LMC Bar, 357, 359, 470  
LMC structure, 458  
long period variables, 387  
luminosity functions, 237, 287, 345, 466  
M31, 499  
Magellanic Bridge, 200, 501  
Magellanic Clouds, 8, 32, 61, 74, 78, 108, 110, 112, 116, 120, 124, 126, 128, 165, 187, 227, 237, 245, 259, 266, 275, 277, 279, 287, 299, 324, 332, 354, 370, 372, 374, 381, 383, 383, 385, 393, 443, 450, 452, 466, 480, 487, 492, 508, 549, 563  
Magellanic Stream, 51, 499, 503, 506  
masers, 387  
mass function, 237, 254, 466  
mass loss, 328, 379, 387  
massive stars, 134, 173, 192, 200, 247  
maximum entropy, 122  
metallicities, 431  
microlensing, 313, 320  
microlensing surveys, 517  
Milky Way halo, 480, 508  
Miras, 542  
molecular clouds, 61, 84, 120, 150  
molecular hydrogen, 21, 377  
molecules, 67, 116, 118, 124, 126, 128, 160  
multibeam-system, 108  
narrow-band, 108  
nebulae, 95  
neutral gas, 21  
neutral hydrogen, 45, 51, 101  
NICMOS/HST, 222  
nomenclature, 17  
non-LTE, 241  
novae, 391  
nucleosynthesis, 279  
numerical simulation, 443, 458, 480  
OB associations, 106  
OB stars, 235, 181  
oldest stars, 448  
open cluster, 237, 254  
orbit mixing, 454  
origin, 501  
PAH, 377  
particle simulation, 503  
photometric properties, 393  
photometric surveys, 405  
photometry, 306  
PL relation, 523  
planetary nebulae, 332, 370  
population synthesis, 354  
pre-main sequence stars, 254, 313, 366, 466  
R Coronae Borealis stars, 361  
radial variables, 527  
radial velocities, 389, 393  
radio lines, 37, 112, 114, 118, 124  
radio observations, 45  
radio synchrotron emission, 139

- radio continuum, 165, 251  
red clump, 320  
robotic telescope, 99  
RR Lyraes, 292, 542
- shock fronts, 136  
SMC, 17, 37, 122, 282, 351, 440, 445, 499  
space motion, 456  
spectral lines, 45, 110  
spectrometer, 108  
spectroscopy, 200  
star clusters, 78, 374, 397, 397, 397, 397, 397, 405, 422, 431, 436, 440, 445, 454  
star formation, 67, 106, 173, 213, 217, 343, 349, 357, 422, 438, 452, 456, 458, 462, 464  
star formation history, 8, 292, 347, 448, 470  
starburst, 213, 227, 243, 245, 287  
starburst galaxies, 247  
stars, 181, 187, 235, 237, 239, 245, 368, 372, 374, 379, 381, 383, 385, 391, 466, 508, 517, 549  
stellar abundances, 200  
stellar associations, 235, 410, 422  
stellar clusters, 130, 150, 208, 217, 354, 443, 446, 499  
stellar content, 187, 341, 368, 385, 452  
stellar dynamics, 443, 454  
stellar evolution, 173, 192, 200, 332, 345, 347, 354, 361, 436  
stellar photometry, 343, 347, 438  
stellar populations, 217, 287, 299, 306, 349, 351, 462  
stellar rotation, 192  
stellar surveys, 523  
structure, 78, 114, 160  
superbubbles, 154, 227, 422  
supergiant shells, 156, 158, 456, 470  
supergiants, 208, 389  
Supernova 1987A, 136, 466, 549  
supernova light echo, 21  
supernova remnants, 74, 78, 136, 139, 141, 143, 145, 148, 165, 187, 251  
supernovae, 466, 549  
supershells, 154, 227, 422
- surveys, 8, 37, 95, 313, 320, 324, 328, 385, 523  
tidal interaction, 51, 499, 503  
TreeSPH, 503
- UV, 150, 237, 391  
UV spectroscopy, 126  
uvby photometry, 359
- variable stars, 187, 239, 313, 387, 513, 517
- WFPC2 photometry, 243  
WR stars, 173, 181, 217
- X-ray binaries, 422  
X-rays, 21, 32, 139, 141, 143, 145, 158, 187, 187, 227, 239
- young stars, 357