

INDEX

Entries in this index refer only to the first
significant mention of that subject in each chapter.

- Absorption lines
 - CH₄, 12, 40
 - CO, 8, 135, 161, 199, 218, 229, 298, 319
 - CO₂, 8
 - H₂, 12, 38
 - H₂O, 8, 298
 - NH₃, 24, 39
 - PH₃, 25
- Asteroids, 72, 97
- Atmospheres, planetary, 1, 35
- Bipolar nebulae, 223
- Black holes, 294, 353
- BL Lac objects, 331, 354
- Callisto, 76
- Chemical abundances, 16, 209, 240, 262, 298
- Clusters, 112, 140, 297, 356
- Cosmological evolution, 308, 356
- Dark clouds; see Molecular clouds
- Dust, 112, 137, 207, 224, 247, 262, 318, 336, 351
- Emission lines
 - carbon monoxide, 155, 188
 - helium, 146, 157
 - hydrogen, atomic, 113, 138, 156, 199, 241, 275, 284, 319, 334, 354
 - hydrogen, molecular, 146, 156, 167, 185, 188, 349
 - ionic, 154, 239, 287, 319, 334
 - mm-wave, 107, 127, 170, 188, 249, 266, 277, 284, 320
- Europa, 74
- Extinction, 113, 125, 172, 185, 195, 210, 229, 237, 247, 262, 282, 301, 319, 338
- Five-kpc ring, 108, 249, 263
- Fluorescence, 195, 215
- Free-free radiation, 143, 157, 199, 239, 254, 284, 327
- Galactic Center, 208, 240, 249, 281, 318, 353
- Galactic structure, 108, 247, 261, 275, 352
- Galaxies
 - active, 291, 329, 354
 - elliptical, 298, 356
 - normal, 297, 352
 - radio, 354
 - Seyfert, 171, 322, 329, 354
 - spiral, 260, 298, 317, 356
- Ganymede, 74, 94
- Globules, 109, 125
- Graphite, 209
- H II regions, 107, 158, 199, 207, 223, 237, 256, 264, 284, 318
- Herbig-Haro objects, 110, 125, 168
- Ice absorption band, 146, 155, 211, 224
- Io, 72, 99, 276, 323
- IRAS, 111, 148
- Isotope ratio, 7, 156, 312
- Jupiter, 1, 39, 77, 94
- Magellanic Clouds, 297
- Magnetic field, 108, 141, 229, 277

- Mars, 8, 66, 93
 Masers, 110, 184, 191, 275, 352
 Mass loss, 109, 140, 170, 201,
 224, 271, 284, 299
 Mercury, 58, 94
 Molecular clouds, 107, 125, 153,
 168, 180, 188, 207, 223, 254,
 263, 275, 284, 318
 Moon, 57

 Neptune, 11, 48, 91
 Nonthermal radiation, 284, 327,
 329, 355
 Novae, 204, 208

 Orion, 115, 156, 167, 179, 187,
 209, 223, 277

 Planetary nebulae, 167, 207, 291
 Planetary surfaces, 57, 89
 Pluto, 14, 82
 Polarization, 148, 208, 223, 340
 Protostars; see Stars, pre-
 main-sequence

 Quasars, 330, 354

 Reddening; see Extinction
 Reflection nebulae, 113, 136,
 223
 Rings, planetary, 79

 Saturn, 11, 39, 79, 90
 Shocks, 111, 167, 191, 277, 352
 Silicates, 113, 132, 155, 183,
 204, 207, 224, 241, 289,
 318, 338
 Silicon carbide, 209
 Spiral arms; see Galactic
 structure
 Star formation, 107, 125, 153,
 168, 179, 188, 262, 275,
 281, 297, 317, 352
 Stars
 carbon, 208, 257, 300
 Cepheid, 301
 giant, 144, 191, 207, 256,
 264, 299, 319
 O and B type, 108, 140, 160,
 224, 242, 256, 264, 276
 pre-main-sequence, 116, 125, 153,
 181, 210, 223, 242, 264, 275,
 328, 352
 supergiants, 204, 207, 256, 264,
 299, 319
 T Tauri, 109, 133, 161, 168, 277
 Stellar populations, 262, 303
 Stellar winds; see Mass loss
 Supernovae, 109, 141, 170, 287, 319

 Titan, 11
 Triton, 14, 82

 Unidentified emission features,
 146, 155, 212, 289, 344
 Uranus, 11, 42, 81, 92

 Venus, 8
 Volcanoes, 99