

INDEX OF SUBJECTS

- Abell clusters (see clusters of galaxies) 47, 51-53, 65-67, 94, 97, 192-197, 229-231, 306-311, 314-317
- accretion discs 111
- active galaxies (see radio sources, Seyfert galaxies, ultraviolet spectra, X-ray sources)
- Bautz-Morgan class 259
- black halos 200
- BL Lacertae objects (see radio sources, ultraviolet spectra, X-ray sources) 84-87, 94, 119-122, 201, 268
- absorption line redshifts 131, 132
- radio properties 185, 186
- brightness of the night sky 58, 59, 262
- Butcher-Oemler effect (see colors of galaxies) 41, 45-47, 49-55, 57, 71, 143, 205, 213
- 3CR Catalogue 11, 41, 43, 44, 47, 54, 73, 83, 85, 89, 90-94, 97, 99-105, 119, 125, 127, 135-144, 147, 165-172, 177, 197, 209-212, 235-240, 248-250, 267, 272-277, 280, 281
- clustering (see correlation functions)
- galaxies 6, 20, 26-30, 31-38
evolution 27, 37
- quasars 82, 147
- radio sources 97, 145-152
- clusters of galaxies (see evolution, Sunyaev-Zel'dovich effect, X-ray sources)
- brightest members 39, 143
- high redshift 69
- intracluster gas 95, 109, 187-197, 212-214, 305-319
- protoclusters 213, 237
- quasars 94, 109
- radio galaxies 95
- redshifts 47, 51, 65
- richness 212, 229-231, 310
- COBE 289
- colors of galaxies (see infrared observations, spectral indices)
- color at high redshifts 9-15, 21, 45-47, 49-55, 71, 142, 143, 258, 259, 271
- color distribution 10, 21, 53, 262
- magnitude-color relation 50
- redshift-color relation 9, 10, 271
- correlation functions
- galaxies 20, 27-30, 31-38, 94-97, 150, 216, 220, 224
- joint distribution in r and v 38
- radio sources 145, 150, 152
- cosmological models (see Hubble diagram, large-scale structure of the universe, standard candles)
- big bang model (see gravitational instability picture)
- count-magnitude relation 5-6, 26, 137-144
- parameters 11-13, 27, 36, 39, 45, 58, 66, 119-121, 219, 231, 261, 274, 275, 299-302
- chronometric cosmology 54, 75
- delayed big bang model 127-129
- redshifts not proportional to distance 73-75, 82, 99-105, 127-129, 200
- counts
- galaxies 1-8, 9-15, 17-21, 23-30, 57, 217-224
- extinction 29, 30
- redshift-count relation 26
- spectral types 25, 26
- quasars 73-76, 77-82, 100, 142, 151
- radio sources 137-144, 148-151

- stars 2, 18
- X-ray sources 201-203, 211
- double quasar 0957+561 114, 179, 180, 181-184
- Eddington limit 200
- evolution
 - clusters of galaxies 27, 37, 52-54, 196, 212, 213, 231
 - galaxies 5-7, 10-13, 21, 45-47, 49-55, 71, 257-261, 271
 - models 5, 6, 11-13, 26, 43-47, 57-64, 274, 275
 - quasars 73-76, 80-82, 176, 200, 210
 - radio sources 137-142
 - X-ray sources 214, 231, 233
- galaxies (see counts, evolution, halos, luminosity function, radio sources, spectroscopy, standard candles, ultraviolet spectra, X-ray sources)
 - absolute magnitudes 41, 259
 - cD galaxies 96, 194
 - E galaxies 39-48, 257-262, 269-277
 - high redshift
 - colors (see Butcher-Oemler effect, colors of galaxies, infrared observations)
 - discovery 41-43, 137
 - redshift measurement 41-44
 - photometry 1, 7, 11, 18, 39-48, 50
 - population synthesis 14, 247
 - star mass function 61, 274
 - protogalaxies 58, 64
 - S0 galaxies (see stripping model) 47, 49, 53
 - winds 159, 215
- gamma ray sources 209, 227
- gravitational instability picture 27, 36, 212, 217, 221, 231, 293-303
 - curvature fluctuations 219
 - peculiar velocities 217-222, 323, 326
- gravitational lens model (see double quasar)
- halos
 - absorption lines 107-110, 113, 116, 131, 156-159
 - HI 156-159, 214
 - massive 59
 - Holmberg radius 156-159
 - Hubble diagram 20, 69, 260, 272-274, 326
 - Hubble radius 217, 218
 - hydrogen line ratios (see quasars, Seyfert galaxies)
- infrared observations
 - giant E galaxies 257-262, 270-272
 - quasars 263-268, 276, 279-282
 - radio sources 263-268
- intergalactic matter (see clusters of galaxies) 110, 113, 125, 153-159, 295, 300, 302
- Jagellonian field 28, 34, 35
- jets
 - optical 205
 - radio 105, 162, 167-176
 - beams model 173, 186
 - ultraviolet 248
 - X-ray 192
- K-correction 9, 12, 21, 24-26, 41, 143, 247, 257
- large-scale structure of the universe 36, 145-152, 216-224, 328
- Lick catalog 11, 27, 28, 34-38, 97, 147
- line locking 117
- luminosity function
 - galaxies 7, 26, 229
 - quasars 210
 - radio sources 141
 - X-ray sources 230, 231
- microwave background (see Sunyaev-Zel'dovich effect)
 - large-scale anisotropy 219-222, 321-328
 - small-scale anisotropy 293-303
 - spectrum 214, 283-291

- multiplicity function 229-230
 NGC catalog 44, 103, 112, 127, 158, 162, 169-172, 240-243
 Next Generation Telescope 276
 N systems 83-87, 162
- peculiar velocities 217-222, 323, 326
 power house 209
 primeval galaxies 43, 57-64, 215, 216
 protoclusters 213, 237
 protogalaxies 58, 64
- quasars (see counts, evolution, infrared observations, luminosity functions, radio sources, spectral indices, spectroscopy, standard candles, ultraviolet spectra, X-ray sources)
 absorption lines
 optical 107-119
 ultraviolet 125, 126
 21 cm 110, 113, 153-159
 association with galaxies 41, 43, 48, 83-87, 89-97, 99-105, 112, 127, 128, 183, 184
 as young galaxies 62, 63
 environment 94-96
 rich clusters 94, 109-112
 within galaxies 83-87
 D2 quasars 171
 emission lines 119-123, 235-245
 emission processes 200
 hydrogen line ratios 235-245, 249, 279-282
 non-cosmological redshifts 73-75, 82, 99-105, 127-129, 200
 optical structures 83-87, 133
 powerhouse 209
 superluminal velocities 173
- radio sources (see BL Lacertae objects, counts, evolution, jets, luminosity function, quasars, Seyfert galaxies, spectral indices)
 equipartition model 214
 identification 135-144, 263-268, 269-277
 morphologies 161-163, 165-176, 177, 178, 185, 186
 radio galaxies 41, 43, 89-97, 135-144, 269-276
 environment 89
 variability 166, 170, 171
 X-ray sources 214
- Salpeter mass function 61
 scintillation 166
 Selected Area 57 5, 10, 13, 17, 41
 Selected Area 68 41, 71
 Seyfert galaxies (see radio sources, ultraviolet spectra, X-ray sources) 83-87, 96, 122, 210
 hydrogen line ratios 279
 radio structure 161-163
 Shapley Ames Catalog 99
 Silk mass 300
 Space Telescope 23, 37, 43, 57-64, 112, 114, 134, 137, 143, 243, 275, 276
 spectral indices
 infrared 264-266
 radio 165-176, 185
 X-ray 210
 spectroscopy
 faint galaxies 39-48, 71
 redshift measures 43
 quasars 84-87
 standard candles
 giant E galaxies 39-48, 257-262
 quasar 119-123
 stripping model 47, 192, 205, 212
 Sunyaev-Zel'dovich effect 196, 305-312, 313-319
 superclusters 65-67, 114
 local supercluster 6-8
 superluminal velocities 173
- ultraviolet spectra
 active galaxies 235-245
 BL Lacertae objects 248
 galaxies 9, 24, 44, 247, 248
 jets 248
 quasars 125, 126, 235-245, 248-25
 Seyfert galaxies 236-244, 250-251
- V/V max statistic 73, 140
 X-ray background 200-203, 207-225, 233
 anisotropy 211, 213, 216-222

- temporal fluctuations 227, 228
- X-ray sources (see counts, evolution, jets, luminosity function, spectral indices)
- BL Lacertae objects 210
- clusters of galaxies 54, 55, 189-197, 212, 213, 231
 - protogalaxies 64
- emission processes 207-225
- galaxies 192-194
 - nuclei 207-212
 - protogalaxies 64, 215
 - quasars 198-203, 207-212
 - radio sources 214
 - Seyfert galaxies 163
 - stars 189, 201, 205
 - variability 209
- Zwicky catalogue 27, 28, 34, 35, 148