

INDEX OF NAMES

- Abell, G. O. 317, 326, 328, 337, 339, 341–352, 365–366, 493–495, 515
- Ables, H. D. 363, 366
- Adam, G. 271
- Adgie, R. L. 214–215, 252, 256, 257
- Aizu, K. 422, 433
- Alfvén, H. 306, 310
- Allen, R. J. 265, 269–270, 312, 379, 498, 515
- Aller, H. D. 203, 211
- Alloin, D. 125, 188–189
- Altenhoff, W. J. 16, 35
- Ambartsumian, V. A. 102, 109, 123–124, 272, 275, 380, 390, 482, 490, 514
- Amiot, F. 251, 257
- Anderson, B. 214, 215
- Anderson, K. S. 116, 124, 155–159
- Andrew, B. H. 197–198, 200–201, 211, 213, 237, 242, 244–245, 248, 271
- Andrievskii, A. E. 75, 80
- Andrillat, Y. 116, 124, 188–189
- Angione, R. J. 171–178, 281, 382, 391
- Arakelian, M. A. 110, 124–125, 139, 149, 435
- Arhipova, V. 139, 149
- Arnett, W. D. 513
- Arp, H. C. 3, 10, 35, 39, 44, 46, 51, 55, 67, 72, 75, 77, 80, 99, 101–103, 110–111, 119–120, 124, 148–149, 160, 162, 250, 276, 280–281, 283, 379, 380–392, 426, 431, 433, 494, 515
- Audretsch, J. 424, 433
- Axford, W. I. 422, 433
- Baade, W. 3–4, 9–10, 46, 51, 55, 67, 72, 75, 77, 80, 316, 337, 495
- Babadzhanjanz, M. K. 157, 159
- Babcock, H. W. 43–44, 60
- Bahcall, J. N. 102, 123–124, 138, 207, 211, 259, 261–262, 337, 426, 431, 433, 471, 473, 500, 515
- Bahcall, N. A. 426, 433
- Bailey, J. A. 409, 433
- Baldwin, J. E. 504, 517
- Barber, D. 214–215
- Barbera, G. 35
- Barbieri, C. 401, 403
- Barbon, C. 265
- Bardeen, J. M. 298–300, 305, 428, 433
- Bare, C. C. 205, 211–212, 214–215, 242, 248, 304–305, 307, 310
- Barnard, E. E. 349–350
- Barnothy, J. M. 186–187, 281, 340, 403, 424, 424, 433, 478–491
- Barnothy, M. F. 424, 433, 478–491
- Bash, F. N. 384, 391, 430, 433
- Batchelor, G. K. 521–522, 525
- Baum, W. A. 2–3, 5, 10, 281, 318, 322–323, 332–334, 336–337, 339, 393–396, 401, 478, 490, 494, 515
- Bautz, L. P. 343, 350–351
- Becklin, E. E. 39–40, 45, 122, 124, 146, 149
- Beer, A. 351
- Bell, S. J. 207, 211, 213
- Bergeron, J. 501, 511, 515–516
- Bergkvist, K. E. 513, 515
- Bertaud, Ch. 271
- Bertiau, F. C. 495, 516
- Bertola, F. 34, 494, 515
- Biermann, L. 522, 525
- Bigay, J. 271
- Blake, G. M. 258
- Blumenthal, G. R. 521, 525
- Bolton, J. G. 193, 211, 409–410, 414–416, 432–434, 444, 447, 451–452, 458, 463, 466, 468
- Bondi, H. 404, 406, 480–481, 490
- Bortolot, V. J. 503, 515
- Bottinelli, L. 27, 34–36, 265, 268
- Bowyer, C. S. 198, 211, 501, 515
- Braccisi, A. 98, 102, 191, 211, 410, 416, 433, 453–457, 458, 463
- Bracewell, R. N. 505, 507, 516
- Brandie, G. W. 197, 211, 213, 451
- Brandt, J. C. 42, 45
- Brecher, K. 505, 517, 520–525
- Bridle, A. H. 13, 34, 207, 211, 413, 433, 437–443, 504, 515
- Brotten, N. W. 205, 211
- Brown, G. S. 353, 357, 366
- Bruns, A. 65
- Bunner, A. N. 501, 515
- Burbidge, E. M. 9–11, 15, 34, 56, 60, 74, 93, 98, 101–102, 109–126, 138, 140, 149, 151, 154, 223, 256, 257, 259, 260, 262, 270, 278, 280, 284, 286, 288–289, 295, 339, 370, 375–376, 378–379, 389, 391, 417, 433, 452, 483, 490, 493, 499, 500, 502, 515
- Burbidge, G. R. 15, 34, 74, 93, 98, 101–102, 111–114, 117, 119, 122–124, 198, 209, 211–212, 223, 251, 256–257, 260, 262, 270,

- 272, 276, 278, 280, 286, 288–289, 376,
378–379, 389, 391, 417, 424, 427–428, 433,
492–517
- Burgess, A. 76, 80
- Burke, B. F. 16, 22, 34–35
- Burns, R. 23, 34
- Butler, H. E. 516
- Byram, E. T. 334, 337, 501, 516
- Campbell, W. W. 139, 149
- Canavaglia, R. 251, 257
- Cannon, R. D. 204, 212, 384, 391
- Caroff, L. J. 151–154
- Carpenter, R. L. 341, 351
- Carranza, G. 69, 72, 75, 80
- Carruthers, G. R. 13, 34
- Cavaliere, A. 166, 168, 278, 280, 298–299, 301,
305, 476–477
- Cavallo, G. 512, 515
- Ceccarelli, M. 410, 433
- Chamaroux, P. 27, 34, 121, 124, 264–266, 268
- Chambers, R. H. 324, 337, 400
- Chan, Y.–W. 138
- Chernin, A. D. 475, 477, 510, 516, 521, 525
- Chertoprud, V. E. 180, 182–183, 186–187,
294–295, 298–299
- Christiansen, W. 422, 433
- Churchwell, E. 33
- Chuvaev, K. 62–65
- Ciurla, T. 304–305, 309–310
- Clark, B. G. 32, 198, 205, 211–212, 214–215,
222–223, 228–229, 242, 248, 304–305, 307,
310
- Clark, G. W. 512, 515
- Clarke, M. E. 447, 452
- Clarke, R. W. 205, 211
- Clauser, J. F. 503, 515
- Code, A. D. 319, 337
- Cohen, M. H. 198, 205, 211–212, 214–215,
222–223, 228–229, 242, 248, 271, 304–305,
307, 310, 519
- Cole, D. J. 447, 451–452
- Coleman, P. C. 501, 515
- Colgate, S. A. 245–246, 248, 297, 299, 306, 310
- Compton, A. H. 481, 484, 490, 508
- Condon, J. 198, 212
- Conklin, E. K. 505–507, 516, 518–519
- Conway, R. G. 230–231
- Corbett, H. H. 203, 212, 225–226, 238, 248
- Corwin, H. G. 353, 355, 357, 366
- Costero, R. 15, 35, 50, 53, 55
- Courtès, G. 69, 72, 75, 77, 80
- Cowan, C. L. 428, 433
- Craven, P. G. 332, 337
- Crawford, D. F. 437, 442
- Critchey, J. 214–215
- Cromwell, R. 116, 124, 155–159
- Crowther, J. H. 214–215
- Cruvellier, P. 75, 77, 80
- Curtis, H. D. 382, 391
- Daniel, R. R. 434
- Danielson, R. E. 111, 124
- Darchy, B. F. 269–270
- Davidson, W. 414, 433
- Davies, R. D. 67–73, 498, 516
- Davis, M. M. 197, 205, 212, 410, 433–434,
437–443, 444–452
- Davis, R. 512
- Day, G. A. 447, 451–452
- Deeming, T. J. 174
- de Graaf, T. 513, 516
- Dehnen, H. 424, 433
- de Jager, G. 68, 72
- De Jong, M. L. 75, 80, 190, 211, 389, 391
- de la Beaujardière, O. 86
- Delhaye, J. 256
- de Mendonea, F. 198, 211
- Demoulin, M.–H. J. 27, 34, 112, 138, 370, 375
- Dennison 330
- Dent, W. A. 103, 138, 200–201, 210–211, 235,
248, 259–263, 265, 270
- de Vaucouleurs, A. 65, 90–91, 111, 125, 353,
366, 376, 379, 391, 494, 517
- de Vaucouleurs, G. 1–2, 11, 33, 35, 41, 65, 73,
87, 90–91, 111–112, 125, 189, 316–317,
319–320, 322, 329, 338–342, 351, 353–366,
376, 379, 382, 391, 398, 400, 431, 433, 494,
517
- DeVeny, J. 112
- De Young, D. S. 422, 433
- Dibai, E. A. 110, 112–113, 124, 139, 149,
155–156, 159–160, 162, 435
- Dicke, R. H. 334, 337, 484, 490, 510, 516
- Dickel, J. R. 410, 433
- Dickens, R. J. 89–92
- Dixon, R. S. 75, 80, 85–86, 439, 442–443, 451
- D'Odorico, S. 14, 35, 362, 366
- Donaldson, W. 214–215
- Doras, 138
- Doroshkevich, A. G. 414, 421, 433, 462–463,
510, 516, 531
- Duchesne, M. 40, 45
- Dumortier, B. 271
- Du Puy, D. L. 101–102, 110, 124
- Dyson, F. J. 288–289, 297–299
- Eastmond, S. 317, 337, 344, 350–351, 365–366
- Eddington, A. S. 481
- Efanov, V. A. 225–226
- Eggen, O. J. 10
- Ehman, J. R. 439, 443
- Einasto, J. 37–45
- Einasto, L. 44

- Einstein, A. 404, 406
 Ekers, R. D. 11, 36, 190, 209–211, 222–223, 229, 234, 240, 248, 259, 261–262, 266, 282, 424, 433, 447, 451–452, 468,
 Ellder, J. 205, 212, 242, 248, 304, 305, 307, 310
 Elliot, H. 512, 516
 Ellis, G. F. R. 404, 406, 527, 530, 531
 Elsmore, B. 252, 257, 458, 463
 Elvey, C. T. 66
 Elvius, A. 306–310
 Epstein, E. E. 198, 201, 203, 212, 227, 229
 Evans, A. 285–289

 Fahlman, G. G. 304–305
 Fairall, A. P. 101, 103
 Falla, D. F. 285–289
 Fanti, C. 458, 463
 Fanti, R. 410, 433, 458, 463
 Fath, E. A. 139, 149
 Faulkner, J. 334, 337, 431, 434, 506, 517
 Fehrenbach, Ch. 256
 Feldman, P. A. 423, 427–428, 434
 Felten, J. E. 213, 281, 312, 382, 391, 501, 504, 516
 Field, G. B. 73, 306, 423, 433, 497, 500, 509, 514–515
 Fisher, R. O. 75, 80, 439, 443
 Fitch, L. T. 85–86, 439, 443
 Fitch, W. S. 204, 211
 Fogarty, W. G. 168
 Fomalont, E. B. 252, 256–257, 416, 433, 443
 Ford, W. K. 14, 35, 37, 42–45, 49–55, 91, 98, 102, 111, 125, 268, 362, 366
 Formigini, L. 191, 211, 433, 453, 456–458, 463
 Forro, M. 481–482, 490
 Fowler, W. A. 278–280, 298, 301, 305, 427–429, 433
 Fraser, C. W. 382, 391
 Friedman, H. 334, 337, 501, 516
 Fritz, G. 334, 337, 501, 516
 Frost, A. D. 214–215
 Fujimoto, Y. 422, 433

 Galt, J. A. 409–410, 433, 439, 443
 Gamow, G. 479, 483–484, 490
 Gandolfi, E. 191, 211, 453, 456–458, 463
 Gardner, F. F. 240–241, 247–248, 410, 433, 523, 525
 Garmire, G. P. 512, 515
 Garnier, R. 271
 Gent, H. 214–215
 Georgelin, Y. 69, 72, 75, 80
 Getting, I. A. 481, 484, 490, 508
 Gex, F. 256
 Gilbert, J. 230–231
 Gillett, F. C. 163
 Ginzburg, V. L. 210–211, 288–289, 296, 299, 311, 510–512, 516

 Giovannini, C. 410, 433
 Gleeson, 231
 God. 480
 Godart, O. 435
 Gold, T. 296, 299, 480, 490, 501, 516
 Goldreich, P. 279–280, 297, 299
 Goldstein, S. 498, 516
 Gordon, C. 18, 34
 Gordon, K. 22–23, 34
 Gottesman, S. T. 68, 70, 72
 Gouguenheim, L. 27, 34–35, 265, 268–269
 Gould, R. J. 15, 34, 501, 510, 512, 516
 Gower, J. F. R. 259, 263, 409, 433, 437, 443, 451, 471, 473
 Graham, I. 249–250
 Gratton, L. 338
 Grazidei, H. Th. 481, 490
 Greenstein, J. L. 122, 124, 294–295
 Greisen, K. 511, 516
 Grewing, M. 478, 490
 Gribbin, J. R. 427–428, 434
 Grueff, G. 191, 211, 409–410, 433, 447, 451, 453–457, 467–468
 'Gruppo ROUB' 447, 451
 Gubbay, A. J. 209–211, 228–229
 Gudzenko, L. I. 180, 186–187
 Guélin, M. 73–74
 Gulkis, S. 198, 205, 211–212, 222–223
 Gunn, J. E. 279–280, 297, 299, 426, 432, 499, 516, 531

 Haddock, F. T. 235, 248
 Hagen-Thorn, V. A. 157, 159
 Hall, J. 55
 Hanes 6, 11
 Hanna 132
 Hansson 205, 212, 242, 249, 304–305, 308, 310
 Hardebeck, E. G. 205, 211
 Harlan, E. 304–305, 309–310
 Haro, G. 41, 45, 109–110, 124, 139, 149
 Harris, B. J. 213, 232–248, 410, 433, 442–443, 447, 450–452
 Harris, D. E. 205, 211
 Harrison, E. R. 374–375, 521, 524–525
 Hartwick, F. D. A. 10
 Harwit, M. 503, 516–517
 Hasegawa, H. 422, 433
 Hawking, S. W. 404, 406, 527, 530–531
 Hawkins, G. S. 359, 366
 Hayashi, C. 335, 338
 Hayes, D. 321, 337
 Hazard, C. 207, 211, 507, 516
 Heckathorn, H. 295
 Heckmann, O. 315, 336–338, 527, 530–531
 Heesch, D. S. 75, 80, 190, 193, 197, 205, 211, 222–223, 240, 248, 372, 422, 433, 438–440, 443

- Heidmann, J. 27, 35–36, 47, 121, 124, 264–266, 269–270, 340
 Heidmann, N. 35, 340, 365–366
 Heiles, C. 259, 262, 471, 473
 Henry, R. C. 334, 337, 501, 516
 Herzog, E. 106
 Hess, V. F. 481, 490
 Hewish, A. 205, 207, 211–213
 Hillier, R. R. 290
 Hindman, J. V. 24, 35
 Hitchcock, J. L. 71–72
 Hjellming, R. 33
 Hobbs, R. W. 203, 209, 212, 225–226, 238, 248
 Hodge, P. W. 3, 9, 10, 46–47, 71–72, 75, 77, 80
 Hoffleit, D. 179, 186
 Högbom, J. A. 27, 35
 Hogg, D. E. 193, 212, 223, 250
 Höglund, B. 212, 242, 248, 304–305, 307, 310, 439, 443
 Holden, D. J. 431, 433
 Hollinger, J. P. 203, 209, 212
 Holmberg, E. 71–72, 89, 91, 96, 268, 329, 337, 341, 343, 347, 351, 356–357, 365–366, 369, 375–376, 378–379, 384, 389–391, 476–477, 495
 Horak, Z. 340, 480, 490
 Houck, J. R. 503, 516–517
 Houziaux, L. 516
 Howard, W. E. 75, 80
 Hoyle, F. 114, 123–124, 189, 209, 212, 257, 278, 280, 288, 289, 301, 305, 331, 337, 380, 391, 404, 406, 414, 427–429, 433, 501, 512, 514, 516, 526–531
 Hubble, E. P. 87, 314, 317, 319, 329, 331, 337, 493, 495, 504, 516
 Hughes, R. G. 431, 433
 Huguenin, G. R. 33
 Hulbosch 498, 516
 Humason, M. L. 27, 35, 109, 125, 262–263, 317, 319, 330, 337, 340, 401, 478, 490, 504
- Iben, I. 10–11, 334, 337
 Ivanov, V. N. 75, 80
- Jacobs, K. C. 532
 Jauncey, D. L. 198, 205, 212, 214–215, 222–223, 228–229, 242, 248, 304–305, 307, 310, 412, 433, 437, 442, 446, 451
 Jennison, R. C. 498, 516
 Johnson, H. L. 324–325, 337, 399, 400
 Johnson, H. M. 13, 35, 37, 45
 Julian, W. H. 279–280, 297, 299
 Just, K. 328, 337
- Kafka, P. 296–299, 418, 433, 435, 468
 Kalatnikov, I. M. 531
 Karachentsev, I. D. 331, 337, 502, 516
- Kardashev, N. S. 196, 212, 296, 299, 424, 433
 Kawabata, K. 422, 433
 Kellermann, K. I. 190–213, 214–215, 222–223, 228–229, 231, 233, 238, 242, 247–248, 250, 273, 276, 304–305, 307, 310–311, 410, 433, 438–443, 444–452
 Kenderdine, S. 82, 86, 240, 248, 446–447, 451, 458, 460–461, 463
 Kennedy, J. E. D. 409–410, 433, 439, 443
 Kerr, F. J. 24, 29, 35
 Khachikian, E. Ye. 100–103, 110, 112, 125, 139, 150, 160–162
 Kiang, T. 359, 366
 King, I. R. 1, 10–11, 55, 61, 87–88, 189, 278, 299, 435
 Kinman, T. D. 37, 45, 120, 124, 137, 164, 204, 212, 259, 260, 262, 283, 292, 295, 304–305, 309–310
 Kisliakov, A. G. 225–226
 Klein, O. 306, 310
 Kleinmann, D. E. 163, 198–199, 212, 277, 280, 307–308, 310
 Koehler, J. A. 30, 35, 498, 516
 Kollberg, E. 205, 212, 242, 248, 304–305, 307, 310
 Komberg, B. V. 102
 Komesaroff, M. M. 231
 Kotowski, R. 531
 Kozlovsky, B. Z. 123–124, 207, 211
 Kraft, R. P. 116, 124, 156–159
 Kraichnan, R. H. 522, 525
 Krasnogorskaya, A. A. 83, 86, 139, 149
 Kraus, J. D. 75, 80, 85–86, 198, 212, 410, 433, 439, 442–443, 450–451
 Kraushaar, W. L. 501, 512, 515
 Krieger, C. J. 401, 403
 Kristian, J. 531
 Kron, G. E. 251, 257
 Kuiper, G. P. 35
 Kunkel, W. E. 179–180, 182–184, 186–187
 Kuril'chick, V. N. 75, 80
 Kurt, V. 500, 516
 Kuzmin, G. 44
- Lallemant, A. 40, 45, 251, 256–257
 Lamla, E. 304–305, 309–310, 478, 490
 Lampton, M. 198, 211
 Lang, K. R. 75, 80
 Langford, W. R. 329, 337
 Lari, C. 458, 463
 Lasker, B. M. 164, 186, 322, 333, 337
 Lauqué, R. 27, 34, 121, 124, 264–266, 269–270
 Lavakare, P. J. 434
 Legg, A. J. 209–211, 228–229
 Legg, M. P. C. 231
 Legg, T. H. 205, 211, 218, 430, 433
 Lelièvre, G. 251–257

- Lemonnier, J. P. 256
 Lequeux, J. 416, 434, 443
 Lerche, I. 210, 212
 Le Roux, E. 202, 212
 Lesh, J. R. 343, 351, 482, 490
 Lewis, B. M. 11, 23, 35, 91, 267–268, 269–270, 391–392
 Lifshitz, E. 474–475, 477, 531
 Limber, D. N. 8, 10
 Lin, C. C. 18, 35, 61
 Lipovetskii, V. A. 331, 337
 Little, L. T. 205, 212
 Ljutyi, V. M. 157, 159
 Locke, J. L. 200–201, 205, 211–212, 237, 242, 244–245, 248
 Longair, M. S. 220, 240, 248, 249–250, 311, 412, 414, 418, 421–422, 424, 430–434, 450–451, 453, 457, 462–463, 466, 468, 470, 510, 516
 Low, F. J. 163, 199, 212, 277, 280, 306–308, 310, 490
 Luyten, W. J. 123, 125, 191, 212, 416, 420, 429, 434, 453, 457, 496, 517
 Lynden-Bell, D. 10, 38, 45, 278, 280, 298–299, 384, 391, 428, 434
 Lynds, B. T. 56–61
 Lynds, C. R. 97–99, 102, 110, 112–114, 117, 121–124, 127–138, 151, 154, 160, 162, 284, 295, 376–379, 382, 384, 389–391, 416, 419–420, 433–434, 453, 500, 502, 515–516

 MacCallum, M. A. H. 531
 McCammon, D. 501, 515
 McClure, R. D. 1–6, 10, 324, 337, 399–400
 McCrea, W. H. 137, 283–284, 405–406, 480, 490, 514
 McCullough, T. P. 203, 212
 Macdonald, G. H. 208, 212, 216–221, 240, 248, 463
 McGee, R. X. 18, 24, 35, 72
 MacKay, C. D. 221, 252, 257, 284, 458, 468
 MacLeod, J. M. 197, 200, 211–212, 271, 410, 434
 McNamara, D. H. 329, 337
 McVittie, G. C. 335, 337–338, 351, 366, 424, 434, 468
 Mack, J. 198, 211, 501, 515
 Mackey, M. B. 410, 433
 Malik, G. M. 329, 338
 Manchester, R. N. 442–443, 447, 452
 Manwell, T. 180, 186
 Maran, S. P. 75, 80
 Marandino, G. E. 203, 209, 212
 Markarian, B. E. 109–110, 112, 124–125, 139, 149, 163
 Martin, P. 428
 Matese, J. J. 531
 Mathewson, D. S. 75, 80

 Mathis, J. S. 14, 35, 155, 159
 Matthews, T. A. 98, 102, 117, 124, 139, 149, 343, 351
 Mattig, W. 315, 337
 Matzner, R. A. 531
 May, R. M. 331, 337
 Mayall, N. U. 27, 34–35, 55, 262–263, 317, 319, 323, 330, 337, 340, 401, 478, 490
 Medd, W. J. 200–201, 211–212, 237, 242, 244–245, 248
 Meekins, J. F. 334, 337, 501, 516
 Menon, T. K. 18, 35
 Merkelijn, J. K. 435, 468
 Meurers, J. 105, 108
 Mezger, P. G. 16, 35
 Michet, D. 256
 Middlehurst, B. M. 35
 Mihalas, D. M. 344, 351
 Miley, G. K. 103, 194, 212, 214–215, 216–221, 223, 259, 263, 396, 430, 434–435
 Miller, W. C. 101–102, 426, 434
 Mills, D. M. 422, 434
 Milton, J. A. 18, 35, 72
 Minkowski, R. 1, 10–11, 38, 42, 45, 54–55, 87–88, 113, 121, 124, 189, 264, 270, 329, 337, 478, 483, 490
 Mizehnikov, G. S. 225–226
 Misner, C. W. 528, 530–531
 Moffet, A. T. 198, 200, 205, 209–212, 222–223, 228–229
 Moiseev, I. G. 225–226
 Moller, C. 337
 Monnet, G. 69, 72, 75, 80
 Moore, J. H. 139, 149,
 Moore, S. 495, 516
 Morgan, W. W. 11, 97–103, 109–110, 116–117, 124, 139, 149, 282, 323, 337, 343, 349–351, 479, 482, 490
 Morris, D. 241, 247–248, 523, 525
 Morrison, P. 166, 168, 278–281, 298–299, 301, 304–305, 476–477, 505, 515
 Muelhner, D. 503, 516
 Murdin, P. 79, 81
 Murdoch, H. S. 437, 442

 Nagarajan, S. 522, 525
 Narlikar, J. V. 405–406, 514, 527, 530–531
 Naumov, A. I. 225–226
 Ne'eman, Y. 531
 Neugebauer, G. 39–40, 45, 101, 103, 122, 124, 140, 146, 149, 163, 167–170, 277
 Neville, A. C. 240, 248, 409, 434, 447, 451, 458, 463
 Neyman, V. J. 502, 516
 Nicolson, G. D. 224, 229
 Niell, A. E. 198, 212
 Noerdlinger, P. D. 151–154, 186, 213

- Notni, P. 82–86
 Novikov, I. D. 506, 510, 516, 531

 O'Connell, D. 434
 O'Connell, R. F. 531
 Oke, J. B. 101–103, 114–115, 122, 124, 139–150,
 154, 160, 162, 189, 266, 319–323, 332, 334,
 337, 339, 397, 399–400
 Oleak, H. 82–86
 Oliver, J. P. 199, 201, 203, 212
 Olsen, E. T. 200, 203, 212, 466, 468
 Olsen, K. H. 179–187
 Oort, J. H. 16–17, 34–35, 270, 334, 337, 352,
 414, 434, 493, 495, 498–499, 510, 517
 Oosterhoff, Th. 9–10
 Oster, L. 76, 81
 Osterbrock, D. E. 112–114, 116, 122–124
 Ostriker, J. P. 279–280, 297, 299
 Ozernoy, L. M. 61, 96, 102, 138, 166, 168, 180,
 182–183, 186–187, 202, 205, 210, 212, 274,
 278, 280–282, 290–295, 296, 298–299, 312,
 391, 435, 475, 477, 510, 516, 521, 525

 Pachner, J. 305, 404–406
 Pacholczyk, A. G. 111, 124, 163, 165–170, 204,
 211, 425, 434
 Pacini, F. 166, 168, 278–280, 297–299, 301,
 305, 476–477
 Padrielli, L. 458, 463
 Page, T. L. 89–92, 112
 Palmer, H. P. 214–215, 220–221
 Palmieri, T. M. 501, 515
 Pankonin, V. 80
 Papadopoulos, K. 210, 212
 Parker, E. N. 523–525
 Parker, R. A. R. 54–55, 112–113, 122–125
 Partridge, R. B. 497, 505–506, 516–517
 Parzen 181
 Pastoriza, M. G. 125
 Pauliny-Toth, I. I. K. 190–191, 193–195,
 197–203, 205, 207, 209–210, 212, 229, 233,
 242, 248, 273, 276, 410, 434, 438–443,
 444–452
 Peach, J. V. 89–92, 314–340, 397, 400–401,
 403, 407, 434, 471, 473
 Peebles, P. J. E. 138, 326, 329, 337, 431–432,
 471, 473–475, 477, 482, 484, 490, 497, 500,
 502, 510, 515–517
 Peimbert, M. 2, 10, 15, 35, 49–50, 52–53, 55,
 339
 Penrose, R. 527, 530
 Penston, M. V. 163, 204, 212, 384, 391
 Penzias, A. A. 334, 337, 498, 503, 507, 516
 Perola, G. C. 196, 213
 Peters, W. L. 316, 338, 361–362, 366
 Peterson, B. A. 327, 329, 337, 343, 351, 499,
 516
 Petrosian, V. 335, 338, 423–424, 434, 458, 463,
 464–469, 477, 529–530
 Pettit, E. 351
 Piddington, J. H. 166, 168, 278, 280, 292,
 295–296, 299
 Pikel'ner, S. B. 61, 296, 299
 Piper, D. E. 424, 434
 Pipher, J. L. 76, 81
 Plagemann, S. H. 427–428, 434
 Pontecorvo, B. 512, 516
 Pooley, G. G. 82, 86, 120, 125, 220, 258,
 409–410, 412–413, 427, 430, 432, 434, 437,
 443, 446–448, 451
 Pottasch, S. R. 15, 34
 Pourcelot, A. 69, 72, 75, 80
 Poveda, A. 7, 10
 Prendergast, K. H. 98, 101–102, 111, 124, 262,
 270, 278, 280
 Pronik, V. I. 62–65, 112–113, 124, 155–156,
 159–160, 162, 435
 Ptolemy, C. 187
 Purton, C. R. 200, 211

 Racine, R. 6, 11, 316, 338, 342, 351
 Raimond, E. 29, 35
 Ramadurai, S. 434
 Ramsay, W. 510, 516
 Raychaudhuri, 305
 Read, R. B. 439, 443
 Redman, R. O. 37, 45
 Rees, M. J. 73, 154, 167–168, 196, 209, 212,
 219, 229, 242, 245, 247–248, 280, 389, 391,
 407–436, 477, 502, 506, 516, 531
 Refsdal, S. 397, 400–401, 403, 412, 434
 Reifenstein, E. C. 16, 35
 Richter, G.-M. 82–86
 Richter, L. 104–108
 Richter, N. B. 104–108
 Rickett, B. J. 214–215
 Ringenberg, R. 468
 Roach, F. 497, 504, 516
 Roberts, M. S. 5, 10, 12–36, 67, 72, 77, 81, 259,
 262–263, 268
 Robertson, D. S. 209–211, 228–229
 Robertson, H. P. 314–315, 338, 404, 406
 Robinson, B. J. 23, 30, 35, 498, 516
 Roeder, R. C. 138, 324, 337, 400, 431, 434,
 471–473
 Rogstadt, D. 72–73, 190, 212, 222–223
 Roll, P. G. 484, 490
 Rome, T. M. 75, 80
 Rood, H. J. 121, 125, 326, 338, 343, 351
 Rood, R. 10–11
 Roosen, R. G. 42, 45
 Rosen, N. 405–406
 Rosino, L. 338
 Rothernan, V. C. A. 384, 391

- Rots, A. H. 33
 Rowan-Robinson, M. 418, 421, 427, 434, 458–463, 466, 468
 Rowson, B. 214–215
 Rubin, V. C. 11, 14–15, 33, 35, 37, 42–45, 49–55, 61, 72, 74, 91, 98, 102, 111, 125, 138, 150, 268, 270, 362, 366, 379, 495, 516
 Rümmler, U. 37–38, 42–45
 Rydbeck, O. E. H. 205, 212, 242, 248, 304–305, 307, 310
 Ryle, M. 120, 125, 205, 212, 409–410, 412–413, 422, 427, 434, 437, 443, 446–448, 451
- Sachs, R. 506, 516, 531
 Sahade, J. 35
 Salpeter, E. E. 61, 280, 299, 300–305, 335, 338, 423–424, 433, 465, 468, 500–501, 515–516, 529–530
 Sandage, A. R. 3, 9–11, 27, 34–35, 39–40, 45, 56, 60, 75, 77, 81, 97–98, 101–102, 111, 120, 123–125, 133, 138, 140–141, 146, 148–149, 191, 212, 247, 252–253, 256–257, 260, 263–264, 295, 314–324, 327, 330, 332–334, 336–340, 342, 347, 350–351, 353, 366, 396, 397, 399–401, 416, 420, 426, 429, 433–434, 453, 457, 478, 481–482, 490, 496, 517
 Sandage, M. 337, 433–434
 Santini, N. J. 203, 212, 225–226, 238, 248
 Sargent, W. L. W. 99–102, 110, 114–115, 119–122, 124–125, 139, 141, 145–146, 149, 160, 162, 190, 209, 212, 264, 266, 382, 389, 391, 428, 433, 496, 517
 Saslaw, W. C. 93–96, 296, 299, 359, 365–366
 Sater, S. L. 199, 201, 203, 212
 Saunders, P. T. 531
 Savage, B. D. 111, 124
 Sazonov, V. N. 202, 205, 212
 Scargle, J. D. 151–154
 Scheer, D. J. 85–86, 439, 443
 Scheuer, P. A. G. 213, 231, 410–412, 418–419, 424, 430, 434, 453, 457, 470, 499, 517
 Schild 339
 Schluter, A. 522, 525
 Schmidt, M. 7, 11, 15, 35, 98, 102, 117, 122, 124–125, 132, 138–140, 145, 149, 191, 212, 251, 256–257, 260, 263, 278, 280, 294–295, 343, 351, 418–422, 426, 428, 431–432, 434–435, 453, 456–458, 463, 465–466, 468–470, 499, 507, 510, 517
 Schneller, P. 104–108
 Schorn, R. A. 199, 201, 203, 212
 Schraml, J. 507, 516
 Schücking, E. 330, 338, 527, 530–531
 Schultz, P. H. 358, 366
 Schwarz, D. 508, 517
 Schwarzschild, M. 111, 124
 Sciamia, D. W. 167–168, 219, 361, 366, 506–507, 516–517, 531
 Scott, E. H. 498, 516
 Scott, E. L. 325, 338, 340, 342, 351, 502, 516
 Searle, L. 15, 33, 35, 66, 121, 197, 213, 265–266
 Seaton, M. J. 49, 55
 Seidel, B. 209–211, 228–229
 Seielstad, G. A. 241, 248
 Sellier, A. 256
 Sërsic, J. L. 36, 313, 482, 490
 Setti, G. 166, 168, 196, 212, 278, 280, 298–299, 301, 305, 422, 434, 476–477, 507, 517
 Seyfert, C. K. 98–99, 103, 109, 111–112, 116, 125, 139, 149
 Shaffer, D. B. 198, 205, 212, 222–223, 228–229
 Shakeshaft, J. R. 213, 221, 409, 434, 518
 Shane, C. D. 329, 338, 502, 516
 Shapiro, S. L. 474, 477
 Sharov, A. S. 41, 45
 Sharpless, S. 79, 81
 Shilepsky, A. 501, 515
 Shimmins, A. J. 197, 213, 233, 235, 248, 409–410, 434, 442–444, 448, 451–452
 Shirley, E. G. 37, 45
 Shivanandan, K. 503, 517
 Shklovsky, I. S. 85–86, 114, 125, 200–201, 205, 213, 242, 247, 272–276, 281–282, 295, 424, 434, 500, 517
 Shobbrook, R. R. 23, 35
 Shteinshleger, V. B. 225–226
 Shuter, W. L. H. 259, 263, 471, 473
 Silk, J. 389, 391, 474–477, 500, 517
 Simon, M. 180, 186, 201, 209, 212–213, 242, 245, 247–248
 Slee, O. B. 214–215
 Sligh, V. 205, 213
 Smith, H. 214–215
 Smith, H. J. 171–178, 179–180, 186, 281, 283
 Smith, L. L. 497, 504, 516
 Smorodinsky, G. 512, 516
 Solheim, J. E. 339, 397–400, 401–403, 406, 424, 434, 491
 Solomon, P. 433
 Somov, B. V. 290, 295
 Souffrin, S. 116, 124–125, 188–189
 Spangenburg, E. E. 75, 80
 Spinrad, H. 2, 5–6, 10–11, 15, 35, 37–39, 44–45, 94, 188–189, 324, 338–339
 Spitzer, L. 280, 296, 299, 500, 515
 Stabell, R. 397, 400–401, 403, 424, 434
 Stebbins, J. 319, 321, 338
 Stecher, F. W. 512, 517
 Steigman, G. 311–312
 Stein, W. A. 163
 Stewart, J. M. 361, 366, 506, 517, 531
 Stock, J. 330, 338
 Stockton, A. N. 120, 125, 382, 391, 500, 517

- Stoesel, L. 256
 Stoops, R. 337
 Straus, E. G. 404, 406
 Strittmatter, P. A. 311–312, 431, 433–434, 506
 517
 Struve, O. 118
 Sturch, C. 329, 338
 Sturrock, P. A. 422–423, 434
 Sunyaev, R. 475, 477, 500–501, 503, 516–517,
 521, 525
 Swenson, G. W. 410, 434
 Swope, H. H. 3–4, 9–11, 316, 337
 Syrovatsky, S. I. 293, 295, 511
 Szekeres, P. 423–424, 434, 464, 468
- Taketani, M. 422, 433
 Tamnann, G. A. 315–316, 338
 Tapscott, J. W. 102
 Terrell, J. 179–187, 427, 434
 Terzian, Y. 66, 75–81, 138, 191, 212, 231,
 390–391, 467–468
 Thaddeus, P. 503, 515
 Thompson, L. 169
 Thorne, K. S. 506, 517, 531
 Tiff, W. G. 1, 9, 11, 62, 65, 88, 103, 320, 338,
 367–375
 Tinsley, B. M. 324, 338–339, 379–400
 Tomassi, P. 458, 463
 Tomita, K. 335, 338
 Tovmasjan, G. M. 125, 225–226, 435
 Turner, K. C. 22, 24, 34–35
 Turnrose, B. 149
 Turtle, A. J. 504, 517
 Tuve, M. A. 22, 34
 Tyler, W. C. 447, 451
- Ulmer, M. 501, 515
 Upgren, A. T. 324, 338
 Usow, V. V. 290, 295
- van Agt, S. L. Th. J. 9–10
 van den Bergh, S. 1–11, 37, 41–42, 44–45, 77,
 80, 237, 242, 248, 315, 324, 329, 334, 337,
 340, 353, 356, 365–366, 398–400
 van de Hulst, H. C. 29 35
 van der Laan, H. 196, 201, 209, 213, 219, 227,
 242, 247, 384, 391, 410, 434
 van Leer 499
 van Rhijn 47
 Venugopal, V. R. 13, 34
 Véron, P. 98, 102, 120, 125, 251–257, 271, 416,
 434
 Verreault, R. T. 471, 473
 Vetešnik, M. 41, 45
 Vigotti, M. 409–410, 433, 447, 451, 458,
 Visvanathan, N. 189
 463
- Volders, L. 27, 35
 von Hoerner, S. 296, 299
 von Weizsäcker, 510
 Van Woerden, H. 29, 35
 Vorontsov-Velyaminov, B. A. 83, 86, 111–112,
 125, 139, 149, 494, 517
- Waak, J. A. 203, 212
 Wade, C. M. 75, 80, 190, 211, 371, 438–440,
 443
 Wagoner, R. V. 280, 300–305, 384, 391, 435,
 517
 Walborn, N. 98, 101–102
 Walker, A. G. 404, 406
 Walker, M. F. 40, 45, 48, 113–114, 125, 251,
 257, 260, 262–263, 270
 Wall, J. V. 247, 409–410, 414, 434, 444, 451–452
 Wallerstein, G. N. 3, 11
 Walmsley, M. 229, 431, 434, 506, 517
 Wampler, E. J. 141, 146, 149–150, 261, 263
 Warren, J. L. 23, 35
 Weber, J. 298–299, 514, 517
 Webster, A. S. 249–250
 Weedman, D. W. 100, 103, 110, 112, 120, 125,
 139, 150, 160, 162, 426, 434
 Weiler, K. W. 241, 248
 Weinberg, S. 512, 514, 517
 Weiss, R. 503, 516
 Weliachew, L. 24, 35, 73, 74, 265, 270,
 Wertz, J. A. 359–360, 366
 Westerhout, G. 29, 35
 Westerlund, B. E. 247
 Westfold, K. C. 231
 Weymann, R. J. 111, 114, 116, 124–125,
 155–159, 199, 204, 211, 213, 425, 434, 510,
 517
 Wheeler, J. 177–178
 White, R. E. 10–11
 Whiteoak, J. B. 75, 81, 240–241, 247–248, 523,
 525
 Whitford, A. E. 319–322, 332, 334, 336, 338–339,
 397, 399–400
 Wickramasinghe, N. C. 189
 Wildey, R. L. 10–11
 Wilkinson, D. 484, 490, 505–506, 516–517
 Williams, P. J. S. 194, 205, 213, 233, 248,
 438–441, 443, 451
 Williams, R. E. 114, 125
 Wills, D. 123–124, 284, 420, 434, 447, 452, 458,
 463, 502, 516
 Wilson, A. G. 427, 434
 Wilson, R. W. 334, 337, 498, 503, 507, 516
 Wilson, T. L. 16, 35
 Wilson, W. J. 199, 201, 203, 212
 Windram, M. D. 205, 212, 460–461, 463
 Wirtanen, C. A. 304–305, 309–310, 329, 338
 Wlérick, G. 103, 251–257, 271

- Wolfe, A. M. 338, 506–508, 516–517, 532
Woltjer, L. 54–55, 88, 166, 168, 246, 248,
277–282, 298, 338, 423, 477, 507, 517, 520,
525
Wood, D. B. 188, 324–325, 338, 399–400
Wray, J. D. 103, 150, 295
Wyndham, J. D. 117, 120, 125, 254, 466, 468
- Yang, K. S. 410, 434
Yen, T. L. 205, 211
Yesipov, V. F. 110, 124, 139, 149, 155–156, 159
- Yu, J. T. 502, 517
- Zagatin, V. I. 225–226
Zasov 435
Zeldovich, Ya. B. 414, 421, 433, 462–463, 475,
477, 503, 510, 516–517, 521, 525, 531
Zwicky, F. 85, 89, 99–101, 103–104, 106,
109–110, 112, 117, 121, 125, 139, 150, 163,
190, 213, 264–265, 331, 338–339, 343, 351,
382, 391, 494–496, 502, 517