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Stellar radio beacons for Galactic astrometry

Quiroga Nunez, L.H.

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Author: Quiroga Nuñez, L.H.

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Bibliography

- Amado, P. J., Suárez, J. C., Moya, A., et al. 2004, *A&A*, 414, 163
- Andrae, R., Fouesneau, M., Creevey, O., et al. 2018, *A&A*, 616, A8
- Antoja, T., Helmi, A., Romero-Gómez, M., et al. 2018, *Nature*, 561, 360
- Asaki, Y., Imai, H., Sobolev, A. M., & Yu Parfenov, S. 2014, *ApJ*, 787, 54
- Audard, M., Gudel, M., & Skinner, S. L. 2003, *ApJ*, 589, 983
- Baade, W. 1951, *Publ. Michigan Obs.*, 10, 7
- Babusiaux, C. & Gilmore, G. 2005, *MNRAS*, 358, 1309
- Bailer-Jones, C. A. L. 2015, *PASP*, 127, 994
- Bailer-Jones, C. A. L., Rybizki, J., Fouesneau, M., Mantelet, G., & Andrae, R. 2018, *AJ*, 156, 58
- Barnes, J. R., Jeffers, S. V., Haswell, C. A., et al. 2017, *MNRAS*, 471, 811
- Bastian, T. S., Benz, A. O., & Gary, D. E. 1998, *ARA&A*, 36, 131
- Battersby, C., Bally, J., & Svoboda, B. 2017, *ApJ*, 835, 263
- Becker, W. & Fenkart, R. 1970, in *IAU Symposium, Vol. 38, Proc. Int. Astron. Union*, ed. W. Becker & G. I. Kontopoulos, 205
- Belokurov, V., Erkal, D., Deason, A. J., et al. 2017, *MNRAS*, 466, 4711
- Belokurov, V., Sanders, J. L., Fattahi, A., et al. 2019, *ArXiv e-prints* 1909.04679, 1909.04679
- Benz, A. O., Conway, J., & Güdel, M. 1998, *A&A*, 331, 596
- Berger, E. 2002, *ApJ*, 572, 503
- Bingham, R., Cairns, R. A., & Kellett, B. J. 2001, *A&A*, 370, 1000
- Bland-Hawthorn, J. & Gerhard, O. 2016, *ARAA*, 54, 529
- Bland-Hawthorn, J., Sharma, S., Tepper-Garcia, T., et al. 2019, *MNRAS*, 486, 1167
- Blitz, L. & Spergel, D. N. 1991, *ApJ*, 379, 631
- Bobylev, V. V. & Bajkova, A. T. 2016, *Astronomy Letters*, 42, 182
- Bochanski, J. J., West, A. A., Hawley, S. L., & Covey, K. R. 2007, *AJ*, 133, 531
- Bonnarel, F., Fernique, P., Bienaymé, O., et al. 2000, *A&AS*, 143, 33
- Bovy, J. & Rix, H.-W. 2013, *ApJ*, 779, 115
- Breen, S. L., Ellingsen, S. P., Contreras, Y., et al. 2013, *MNRAS*, 435, 524

- Browning, M. & K., M. 2007, *ApJ*, 676, 1262
- Brunthaler, A., Reid, M., Menten, K., et al. 2011, *Astron. Nachrichten*, 332, 461
- Brunthaler, A., Reid, M. J., Falcke, H., Greenhill, L. J., & Henkel, C. 2005, *Science*, 307, 1440
- Burns, R. A., Handa, T., Imai, H., et al. 2017, *MNRAS*, 404, 1029
- Caillault, J.-P. & Patterson, J. 1990, *AJ*, 100, 825
- Capitanio, L., Lallement, R., Vergely, J. L., Elyajouri, M., & Monreal-Ibero, A. 2017, *A&A*, 606, A65
- Carpenter, J. M., Snell, R. L., & Schloerb, F. P. 1990, *ApJ*, 362, 147
- Caswell, J. L., Fuller, G. A., Green, J. A., et al. 2010, *MNRAS*, 404, 1029
- Caswell, J. L., Fuller, G. A., Green, J. A., et al. 2011, *MNRAS*, 417, 1964
- Chandra, P., Ray, A., & Bhatnagar, S. 2004, *ApJ*, 612, 974
- Cheng, J. Y., Rockosi, C. M., Morrison, H. L., et al. 2012, *ApJ*, 752, 51
- Chiavassa, A., Freytag, B., & Schultheis, M. 2018, *A&A*, 617, L1
- Churchwell, E., Babler, B., Meade, M., et al. 2009, *PASP*, 121, 213
- Clegg, A. W. 1993, in *Astrophysical Masers*, ed. A. W. Clegg & G. E. Nedoluha (Berlin, Heidelberg: Springer Berlin Heidelberg), 279–282
- Colom, P., Lekht, E. E., Pashchenko, M. I., & Rudnitskij, G. M. 2015, *A&A*, 575, A49
- Condon, J. J., Cotton, W. D., Greisen, E. W., et al. 1998, *AJ*, 115, 1693
- Crosley, M. K. & Osten, R. A. 2018, *ApJ*, 856, 39
- Dame, T. M., Hartmann, D., & Thaddeus, P. 2001, *ApJ*, 547, 792
- De Gasperin, F., Dijkema, T. J., Drabent, A., et al. 2019, *A&A*, 622, A5
- De Propriis, R., Rich, R. M., Kunder, A., et al. 2011, *ApJL*, 732, L36
- Dressing, C. D. & Charbonneau, D. 2013, *ApJ*, 767, 95
- Drimmel, R. 2000, *A&A*, 358, L13
- Dulk, G. 1985, *ARA&A*, 23, 169
- Dwek, E., Arendt, R. G., Hauser, M. G., et al. 1995, *ApJ*, 445, 716
- Efremov, Y. N. 2011, *Astronomy Reports*, 55, 108
- Eiroa, C., Casali, M., Miranda, L., & Ortiz, E. 1994, *A&A*, 290, 599
- Elitzur, M. 1992, *ARA&A*, 30, 75
- Farnes, J. S. 2014, *NCRA Tech. Rep.*, 2

- Fish, V. L., Briske, W. F., & Sjouwerman, L. O. 2006, *ApJ*, 647, 418
- Gaia-Collaboration, Brown, A. G. A., Vallenari, A., et al. 2018, *A&A*, 616, A1
- Gaia Collaboration, Brown, A. G. A., Vallenari, A., et al. 2016a, *A&A*, 595, A2
- Gaia Collaboration, Prusti, T., de Bruijne, J., et al. 2016b, *A&A*, 595, A1
- Gastine, T., Morin, J., Duarte, L., et al. 2013, *A&A*, 549, L5
- Gehrels, N. 1986, *ApJ*, 303, 336
- Georgelin, Y. M. & Georgelin, Y. P. 1976, *A&A*, 49, 57
- Ghez, A., Morris, M., Becklin, E., Tanner, A., & Kremenek, T. 2000, *Nature*, 407, 349
- Giacintucci, S., Markevitch, M., Brunetti, G., et al. 2014, *ApJ*, 795, 73
- Gilmore, G. & Reid, N. 1983, *MNRAS*, 202, 1025
- Godbout, S., Joncas, G., Durand, D., & Arsenault, R. 1997, *ApJ*, 478, 271
- Gómez, F. A., Minchev, I., O'Shea, B. W., et al. 2012, *MNRAS*, 423, 3727
- Goodman, A. A., Alves, J., Beaumont, C. N., et al. 2014, *ApJ*, 797, 53
- Grady, J., Belokurov, V., & Evans, N. W. 2019, *MNRAS*, 483, 3022
- Green, J. A., Caswell, J. L., Fuller, G. A., et al. 2009, *MNRAS*, 392, 783
- Green, J. A., Caswell, J. L., Fuller, G. A., et al. 2010, *MNRAS*, 409, 913
- Green, J. A., Caswell, J. L., Fuller, G. A., et al. 2012, *MNRAS*, 420, 3108
- Green, J. A., Caswell, J. L., McClure-Griffiths, N. M., et al. 2011, *ApJ*, 733, 27
- Green, J. A. & McClure-Griffiths, N. M. 2011, *MNRAS*, 417, 2500
- Groenewegen, M. A. & Sloan, G. C. 2018, *A&A*, 609
- Güdel, M. 2002, *ARA&A*, 40, 217
- Habing, H., Sevenster, M., Messineo, M., van de Ven, G., & Kuijken, K. 2006, *A&A*, 458, 151
- Habing, H. J. 1996, *A&A*, 7, 97
- Hachisuka, K., Brunthaler, A., Menten, K. M., et al. 2009, *ApJ*, 696, 1981
- Hachisuka, K., Choi, Y. K., Reid, M. J., et al. 2015, *ApJ*, 800, 2
- Hallinan, G., Littlefair, S. P., Cotter, G., et al. 2015, *Nature*, 523, 568
- Helmi, A., Babusiaux, C., Koppelman, H. H., et al. 2018, *Nature*, 563, 85
- Henry, T. J., Jao, W., Subasavage, J. P., et al. 2006, *AJ*, 132, 2360
- Herrnstein, J., Moran, J., Greenhill, L., et al. 1999, *Nature*, 400, 539

- Heydari-Malayeri, M., Testor, G., Baudry, A., Lafon, G., & de La Noe, J. 1982, *A&A*, 113, 118
- Heyer, M. & Dame, T. 2015, *ARA&A*, 53, 583
- Höfner, S. & Olofsson, H. 2018, *A&AR*, 26, 1
- Hollenbach, D., Elitzur, M., & McKee, C. F. 2013, *ApJ*, 773, 70
- Honig, Z. N. & Reid, M. J. 2015, *ApJ*, 800, 53
- Honma, M. 2013, *New Trends Radio Astron ALMA Era 30th Anniv Nobeyama Radio Obs Proc a Symp held Hakone*, 476, 81
- Honma, M., Bushimata, T., Choi, Y. K., et al. 2007, *PASJ*, 59, 889
- Honma, M., Hirota, T., Kan-Ya, Y., et al. 2011, *PASJ*, 63, 17
- Honma, M., Nagayama, T., Ando, K., et al. 2012, *PASJ*, 64, 136
- Honma, M., Nagayama, T., & Sakai, N. 2015, *PASJ*, 67, 70
- Houdebine, E. R. 2012, *MNRAS*, 421, 3180
- Houdebine, E. R. & Mullan, D. J. 2015, *ApJ*, 801
- Houdebine, E. R., Mullan, D. J., Bercu, B., Paletou, F., & Gebran, M. 2017, *ApJ*, 837, 96
- Houdebine, E. R., Mullan, D. J., Paletou, F., & Gebran, M. 2016, *ApJ*, 822, 97
- Howard, C. D., Rich, R. M., Reitzel, D. B., et al. 2008, *ApJ*, 688, 1060
- Hubble, E. P. 1926, *ApJ*, 64, 321
- Hubble, E. P. 1929, *ApJ*, 69, 103
- Humphreys, R. 1976, *PASP*, 88, 647
- Ibata, R. A., McConnachie, A., Cuillandre, J.-C., et al. 2017, *ApJ*, 848, 129
- Ilin, E., Schmidt, S. J., Davenport, J. R. A., & Strassmeier, K. G. 2019, *A&A*, 622, A133
- Intema, H. T., Jagannathan, P., Mooley, K. P., & Frail, D. A. 2017, *A&A*, 598, A78
- Intema, H. T., van der Tol, S., Cotton, W. D., et al. 2009, *A&A*, 501, 1185
- Ita, Y., Tanabé, T., Matsunaga, N., et al. 2004, *MNRAS*, 347, 720
- Jackson, P. D., Kundu, M. R., & White, S. M. 1987, in *Cool Stars. Stellar Syst. Sun* (Berlin, Heidelberg: Springer), 103–105
- Jackson, T., Ivezić, Ž., & Knapp, G. R. 2002, *MNRAS*, 337, 749
- Jacobson, H. R., Pilachowski, C. A., & Friel, E. D. 2011, *AJ*, 142, 59
- Jeffers, S. V., Schöfer, P., Lamert, A., et al. 2018, *A&A*, 614, A76
- Jenkins, J. S., Ramsey, L. W., Jones, H. R., et al. 2009, *ApJ*, 704, 975

- Jiang, Z., Yao, Y., & Yang, J. 2003, *ApJ*, 596, 1064
- Joshi, S. & Chengalur, J. 2010, in *Proc. Sci. ISKAF2010*, Vol. 112
- Kao, M. M., Hallinan, G., Pineda, J. S., et al. 2016, *ApJ*, 818, 24
- Katarzyński, K., Gawroński, M., & Goździewski, K. 2016, *MNRAS*, 461, 929
- Kent, S. M. 1986, *AJ*, 91, 1301
- Kettenis, M., van Langevelde, H. J., Reynolds, C., & Cotton, B. 2006, *Astron. Data Anal. Softw. Syst. XV ASP Conf. Ser.*, 351, 497
- Kiraga, M. & Stepień, K. 2007, *Acta Astron.*, 57, 149
- Kochukhov, O. & Lavail, A. 2017, *ApJ*, 835, L4
- Koo, B. C., Park, G., Kim, W. T., et al. 2017, *PASP*, 129, 094102
- Krishnan, V., Ellingsen, S. P., Reid, M. J., et al. 2017, *MNRAS*, 465, 1095
- Krishnan, V., Ellingsen, S. P., Reid, M. J., et al. 2015, *ApJ*, 805, 129
- Kunder, A., Koch, A., Michael Rich, R., et al. 2012, *AJ*, 143
- Kuzmychov, O., Berdyugina, S. V., & Harrington, D. M. 2017, *ApJ*, 847, 60
- Lacy, M., Baum, S. A., Chandler, C. J., et al. 2019, *ArXiv e-prints*, arXiv:1907.01981
- Lallement, R., Babusiaux, C., Vergely, J. L., et al. 2019, *A&A*, 625, A135
- Lasker, B. M. & McLean, B. J. 1994, *STSci Newsl.* 11, 2, 39
- Lebzelter, T., Trabucchi, M., Mowlavi, N., et al. 2019, *A&A*, 631, A24
- Lekht, E. E., Pashchenko, M. I., & Berulis, I. I. 2001a, *Astron. Reports Transl. from Astron. Zhurnal Orig. Russ. Text Copyr. c*, 45, 949
- Lekht, E. E., Silant'ev, N. A., Mendoza-Torres, J. E., Pashchenko, M. I., & Krasnov, V. V. 2001b, *A&A*, 377, 999
- Leto, P., Trigilio, C., Buemi, C. S., et al. 2016, *MNRAS*, 459, 1159
- Lewis, M., Pihlstrom, Y., Sjouwerman, L., Stroh, M., & Team, B. 2018, in *Proc. Annu. New Mex. Symp.*, Vol. 34, 2
- Lian, J., Zhu, Q., Kong, X., & He, J. 2014, *A&A*, 564, A84
- Liljeström, T. & Gwinn, C. R. 2000, *ApJ*, 10, 781
- Lindblad, B. 1927a, *MNRAS*, 87, 420
- Lindblad, B. 1927b, *MNRAS*, 87, 553
- Lindgren, L. 2019, *ArXiv e-prints* 1906.09827
- Lindgren, L., Hernández, J., Bombrun, A., et al. 2018, *A&A*, 616, A2
- Litvak, M. 1969, *Science*, 165, 855

- López-Santiago, J., Montes, D., Gálvez-Ortiz, M. C., et al. 2010, *A&A*, 514, A97
- Luri, X., Brown, A. G., Sarro, L. M., et al. 2018, *A&A*, 616, A9
- Lynch, C. R., Lenc, E., Kaplan, D. L., Murphy, T., & Anderson, G. E. 2017, *ApJL*, 836, L30
- Mackereth, J. T., Bovy, J., & Schiavon, R. P. 2017, *MNRAS*, 471, 3057
- Marrese, P. M., Marinoni, S., Fabrizio, M., & Altavilla, G. 2019, *A&A*, 621, 144
- Martinez-Medina, L. A., Pichardo, B., Peimbert, A., & Carigi, L. 2017, *MNRAS*, 468, 3615
- Matsunaga, N. & Team, t. I. 2006, in *ASP Conf. Ser.*, Vol. 378, 86
- McLean, M., Berger, E., & Reiners, A. 2012, *ApJ*, 746, 23
- McWilliam, A. & Rich, R. M. 1994, *ApJS*, 91, 749
- McWilliam, A. & Zoccali, M. 2010, *ApJ*, 724, 1491
- Mechev, A., Oonk, J. B. R., Danezi, A., et al. 2017, *Proc. Int. Symp. Grids Clouds 2017*, 2
- Melrose, D. B. & Dulk, G. A. 1982, *ApJ*, 259, 844
- Messineo, M. 2004, PhD thesis, Leiden University
- Messineo, M., Habing, H. J., Sjouwerman, L. O., Omont, A., & Menten, K. M. 2018, *A&A*, 619, 35
- Min, C., Matsumoto, N., Kim, M. K., et al. 2014, *PASJ*, 66, 38
- Minier, V., Booth, R. S., & Conway, J. E. 2002, *A&A*, 383, 614
- Miyoshi, M., Asaki, Y., Wada, K., & Imai, H. 2012, *New Astron.*, 17, 553
- Moffat, A. F. J., Fitzgerald, M. P., & Jackson, P. D. 1979, *A&AS*, 38, 197
- Mohan, N. & Rafferty, D. 2015, *PyBDSF: Python Blob Detection and Source Finder*
- Monet, D. G., Dahn, C. C., Vrba, F. J., et al. 1992, *AJ*, 103, 638
- Morgan, W., Whitford, A., & Code, A. 1953, *ApJ*, 118, 318
- Morin, J., Donati, J. F., Petit, P., et al. 2010, *MNRAS*, 407, 2269
- Moutou, C., Hébrard, E. M., Morin, J., et al. 2017, *MNRAS*, 472, 4563
- Mowlavi, N., Lecoœur-Taïbi, I., Lebzelter, T., et al. 2018, *A&A*, 618, A58
- Murray, N. 2011, *ApJ*, 729, 133
- Nakajima, T., Morino, J. I., & Fukagawa, M. 2010, *AJ*, 140, 713
- Ness, M., Freeman, K., Athanassoula, E., et al. 2012, *ApJ*, 756, 22
- Ness, M. & Lang, D. 2016, *AJ*, 152, 14
- Netopil, M., Paunzen, E., Heiter, U., & Soubiran, C. 2016, *A&A*, 585, A150
- Newton, E. R., Irwin, J., Charbonneau, D., et al. 2017, *ApJ*, 834, 85

- Nichols, J. D., Burleigh, M. R., Casewell, S. L., et al. 2012, *ApJ*, 760, 59
- Oort, J. 1927, *BAN*, 3, 275
- Oort, J. H., Kerr, F., & Westerhout, G. 1958, *MNRAS*, 118, 379
- Panagi, P. M. & Andrews, A. D. 1995, *MNRAS*, 277, 423
- Pandian, J. D. 2007, PhD thesis, Cornell University
- Pandian, J. D., Goldsmith, P. F., & Deshpande, A. A. 2007, *ApJ*, 656, 255
- Pasetto, S., Natale, G., Kawata, D., et al. 2016, *MNRAS*, 461, 2383
- Perryman, M., Lindegren, L., Kovalevsky, J., et al. 1995, *A&A*, 304, 69
- Perryman, M. A. C., de Boer, K. S., Gilmore, G., et al. 2001, *A&A*, 369, 339
- Perryman, M. A. C., Lindegren, L., Kovalevsky, J., et al. 1997, *A&A*, 323, L49
- Pestalozzi, M. R., Chrysostomou, A., Collett, J. L., et al. 2007, *A&A*, 463, 1009
- Petterson, B. R. 1989, *Sol. Phys.*, 121, 299
- Pihlström, Y. M., Sjouwerman, L. O., Claussen, M. J., et al. 2018a, *ApJ*, 868, 72
- Pihlström, Y. M., Sjouwerman, L. O., Claussen, M. J., et al. 2018b, *ApJ*, 868, 72
- Pirogov, L. 1999, *A&A*, 348, 600
- Price, S. D. 1995, *Space Sci. Rev.*, 74, 81
- Quiroga-Nuñez, L. H., Van Langevelde, H. J., Reid, M. J., & Green, J. A. 2017, *A&A*, 604, 72
- Reid, M. & Honma, M. 2014, *ARA&A*, 52, 339
- Reid, M., Menten, K., Brunthaler, A., et al. 2014, *ApJ*, 783, 130
- Reid, M., Menten, K., Zheng, X., et al. 2009a, *ApJ*, 700, 137
- Reid, M. J. & Honma, M. 2014, *ARA&A*, 52, 339
- Reid, M. J., Menten, K. M., Brunthaler, A., et al. 2019, *ApJ*, 885, 131
- Reid, M. J., Menten, K. M., Brunthaler, A., et al. 2009b, *ApJ*, 693, 397
- Reiners, A., Joshi, N., & Goldman, B. 2012, *AJ*, 143, 93
- Rich, R. M., Origlia, L., & Valenti, E. 2007, *ApJL*, 665, L119
- Rix, H.-W. & Bovy, J. 2013, *A&A Rev.*, 21, 61
- Roy, S., Hyman, S. D., Pal, S., et al. 2010, *ApJL*, 712, L5
- Sakai, N., Honma, M., Nakanishi, H., et al. 2012, *PASJ*, 64, 108
- Sakai, N., Nakanishi, H., Matsuo, M., et al. 2015, *PASJ*, 67, 69
- Salaris, M., Weiss, A., Cassarà, L. P., Piovan, L., & Chiosi, C. 2014, *A&A*, 565, 9

- Samus, N., Durlevich, O., & al., E. 2004, *VizieR Online Data Cat.*, II/250
- Sande, M. V. D., Decin, L., Lombaert, R., et al. 2018, *A&A*, 609, 63
- Sanna, A., Reid, M. J., Dame, T. M., Menten, K. M., & Brunthaler, A. 2017, *Sci*, 358, 227
- Sanna, A., Reid, M. J., Dame, T. M., et al. 2012, *ApJ*, 745, 82
- Sanna, A., Reid, M. J., Menten, K. M., et al. 2014, *ApJ*, 781, 108
- Savchenko, S. S. & Reshetnikov, V. P. 2013, *MNRAS*, 436, 1074
- Savini, F., Bonafede, A., Brueggen, M., et al. 2019, *A&A*, 622, A24
- Sawada-Satoh, S., Fujisawa, K., Sugiyama, K., Wajima, K., & Honma, M. 2013, *PASJ*, 65, 79
- Schödel, R., Ott, T., Genzel, R., et al. 2003, *ApJ*, 596, 1015
- Schuberth, Y., Richtler, T., Hilker, M., et al. 2010, *A&A*, 513
- Sevenster, M. N., Van Langevelde, H. J., Moody, R. A., et al. 2001, *A&A*, 366, 481
- Sharpless, S. 1959, *ApJS*, 4, 257
- Shibata, K. & Magara, T. 2011, *Living Rev. Sol. Phys.*, 8, 6
- Shimwell, T. W., Röttgering, H. J., Best, P. N., et al. 2017, *A&A*, 598, A104
- Shimwell, T. W., Tasse, C., Hardcastle, M. J., et al. 2019, *The LOFAR Two-metre Sky Survey: II. First data release*
- Shkolnik, E. L., Anglada-Escudé, G., Liu, M. C., et al. 2012, *ApJ*, 758, 56
- Sjouwerman, L. O., Capen, S. M., & Claussen, M. J. 2009, *ApJ*, 705, 1554
- Sjouwerman, L. O., Pihlström, Y. M., Claussen, M. J., & Collaboration, B. 2015, *Why Galaxies Care about AGB Stars III A Closer Look Sp. Time*, 497, 499
- Sjouwerman, L. O., Pihlström, Y. M., Rich, R. M., Claussen, M. J., & Morris, M. R. 2017, in *Proc. Int. Astron. Union*, Vol. 336, 180–183
- Sjouwerman, L. O., Pihlström, Y. M., Rich, R. M., Morris, M. R., & Claussen, M. J. 2017, in *IAU Symposium*, Vol. 322, *The Multi-Messenger Astrophysics of the Galactic Centre*, ed. R. M. Crocker, S. N. Longmore, & G. V. Bicknell, 103–106
- Skrutskie, M. F., Cutri, R. M., Stiening, R., et al. 2006, *ApJ*, 131, 1163
- Slee, O. B., Willes, A. J., & Robinson, R. D. 2003, *Publ. Astron. Soc. Aust.*, 20, 257
- Smirnov, O. M. & Tasse, C. 2015, *MNRAS*, 449, 2668
- Sofue, Y. 2017, *PASJ*, 69, 1
- Spangler, S. R. 1976, *PASP*, 88, 187
- Sparks, W. B., Bond, H. E., Cracraft, M., et al. 2008, *AJ*, 135, 605
- Srinivasan, S., Meixner, M., Leitherer, C., et al. 2009, *ApJ*, 137, 4810

- Stroh, M. C., Pihlström, Y. M., Sjouwerman, L. O., et al. 2018, *ApJ*, 862, 153
- Stroh, M. C., Pihlström, Y. M., Sjouwerman, L. O., et al. 2019, *ApJS*, 244, 25
- Surcis, G., Vlemmings, W., Torres, R., van Langevelde, H., & Hutawarakorn Kramer, B. 2011, *A&A*, 533, A47
- Surcis, G., Vlemmings, W. H. T., van Langevelde, H. J., Hutawarakorn Kramer, B., & Quiroga-Nuñez, L. H. 2013, *A&A*, 556, A73
- Swarup, G. 1991, *Proc. Int. Astron. Union*, 131, 376
- Tan, J. C., Beltran, M. T., Caselli, P., et al. 2014, *Protostars Planets VI*, 149
- Tarter, J. C. & Welch, W. J. 1986, *ApJ*, 305, 467
- Tasse, C. 2014, *ArXiv e-prints* 1410.8706
- Tasse, C., Hugo, B., Mirmont, M., et al. 2018, *A&A*, 611, A87
- Thompson, A. R., Clark, B. G., Wade, C. M., & Napier, P. J. 1980, *ApJS*, 44, 151
- Trapp, A. C., Rich, R. M., Morris, M. R., et al. 2018, *ApJ*, 861, 75
- Trumpler, R. 1930, *Lick Obs. Bull.*, 420, 154
- Turnpenney, S., Nichols, J. D., Wynn, G. A., & Casewell, S. L. 2017, *MNRAS*, 470, 4274
- Ungren, A. 1978, *AJ*, 83, 626
- Urquhart, J. S., Moore, T. J. T., Schuller, F., et al. 2013, *MNRAS*, 431, 1752
- Van De Hulst, H. 1949, *Physica*, 15, 740
- van der Veen, W. & Habing, H. 1998, *A&A*, 194, 125
- van der Walt, J. 2005, *MNRAS*, 360, 153
- van Haarlem, M. P., Wise, M. W., Gunst, A. W., et al. 2013, *A&A*, 556, A2
- van Langevelde, H., Quiroga-Nuñez, L. H., Vlemmings, W., et al. 2019, in *Proc. Sci. EVN2018*, 43
- van Weeren, R. J., Brunetti, G., Brüggén, M., et al. 2016, *MNRAS*, 818, 204
- Vásquez, S., Zoccali, M., Hill, V., et al. 2013, *A&A*, 555, A91
- Vassiliadis, E. & Wood, P. R. 1993, *ApL*, 413, 641
- Villadsen, J. & Hallinan, G. 2019, *ApJ*, 871, 214
- Wainscoat, R. J., Cohen, M., Volk, K., Walker, H. J., & Schwartz, D. E. 1992, *ApJS*, 83, 111
- Wegg, C. & Gerhard, O. 2013, *MNRAS*, 435, 1874
- Wenger, M., Ochsenbein, F., Egret, D., et al. 2000, *A&AS*, 143, 9
- West, A. A., Hawley, S. L., Bochanski, J. J., et al. 2008, *AJ*, 135, 785

- West, A. A., Weisenburger, K. L., Irwin, J., et al. 2015, *ApJ*, 812
- White, R. L., Becker, R. H., Helfand, D. J., & Gregg, M. D. 1997, *ApJ*, 475, 479
- White, S. M. & Franciosini, E. 1995, *ApJ*, 444, 342
- White, S. M., Jackson, P. D., & Kundu, M. R. 1989, *ApJS*, 71, 895
- Whitelock, P. 2003, *Astrophys. Sp. Sci. Libr.*, 283, 19
- Whitelock, P. A., Feast, M. W., & Van Leeuwen, F. 2008, *MNRAS*, 386, 313
- Wielebinski, R. 2012, *J. Astron. Hist. Herit.*, 15, 76
- Williams, P. K., Berger, E., Irwin, J., Berta-Thompson, Z. K., & Charbonneau, D. 2015, *ApJ*, 799, 192
- Williams, W. L., Van Weeren, R. J., Röttgering, H. J., et al. 2016, *MNRAS*, 460, 2385
- Wood, P. R., Alcock, C., Allsman, R. A., et al. 1999, in *Proc. Int. Astron. Union*, Vol. 191, 632
- Wouterloot, J. & Brand, J. 1989, *A&AS*, 80, 149
- Wright, N. J., Drake, J. J., Mamajek, E. E., & Henry, G. W. 2011, *ApJ*, 743, 48
- Xu, Y., Hou, L.-G., & Wu, Y.-W. 2018, *RAA*, 18, 146
- Xu, Y., Reid, M., Dame, T., et al. 2016, *Sci. Adv.*, 2, e1600878
- Xu, Y., Voronkov, M. A., Pandian, J. D., et al. 2009, *A&A*, 507, 1117
- Yadav, R. K., Christensen, U. R., Wolk, S. J., & Poppenhaeger, K. 2016, *ApJ*, 833, L28
- Yang, H., Liu, J., Gao, Q., et al. 2017, *ApJ*, 849, 36
- Yusof, N., Hirschi, R., Meynet, G., et al. 2013, *MNRAS*, 433, 1114
- Zic, A., Stewart, A., Lenc, E., et al. 2019, *MNRAS*, 488, 559