



Universiteit
Leiden
The Netherlands

Hierarchical systems

Hamers, A.S.

Citation

Hamers, A. S. (2016, June 21). *Hierarchical systems*. Retrieved from <https://hdl.handle.net/1887/41202>

Version: Not Applicable (or Unknown)

License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

Downloaded from: <https://hdl.handle.net/1887/41202>

Note: To cite this publication please use the final published version (if applicable).

Cover Page



Universiteit Leiden



The handle <http://hdl.handle.net/1887/41202> holds various files of this Leiden University dissertation

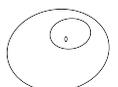
Author: Hamers, Adrian Sven

Title: Hierarchical systems

Issue Date: 2016-06-21

Bibliography

- Abad A. J., Docobo J. A., 1988, *Celestial Mechanics*, 41, 333
- Abbott B. P., et al., 2016, *Physical Review Letters*, 116, 061102
- Aharon D., Perets H. B., 2015, *ApJ*, 799, 185
- Alexander T., 2005, *Phys. Rep.*, 419, 65
- Alexander R., 2012, *ApJ*, 757, L29
- Alexander T., Pfuhl O., 2014, *ApJ*, 780, 148
- Allan R. R., Cook G. E., 1964, *Royal Society of London Proceedings Series A*, 280, 97
- Allan R. R., Ward G. N., 1963, *Proceedings of the Cambridge Philosophical Society*, 59, 669
- Allen R. H., 1899, *Star-names and their meanings*
- Amaro-Seoane P., 2012, preprint, (arXiv:1205.5240)
- Amaro-Seoane P., Sopaerta C. F., Freitag M. D., 2013, *MNRAS*, 429, 3155
- Ambartsumian V. A., 1954, *Contr. Obs. Byurakan*, 15, 3
- Anderson K. R., Storch N. I., Lai D., 2016, *MNRAS*, 456, 3671
- Antognini J. M. O., 2015, *MNRAS*, 452, 3610
- Antognini J. M., Shappee B. J., Thompson T. A., Amaro-Seoane P., 2014, *MNRAS*, 439, 1079
- Antoniadis J., et al., 2013, *Science*, 340, 448
- Antonini F., 2014, *ApJ*, 794, 106
- Antonini F., Merritt D., 2013, *ApJ*, 763, L10
- Antonini F., Perets H. B., 2012, *ApJ*, 757, 27
- Antonini F., Lombardi Jr. J. C., Merritt D., 2011, *ApJ*, 731, 128
- Antonini F., Murray N., Mikkola S., 2014, *ApJ*, 781, 45
- Antonini F., Hamers A. S., Lithwick Y., 2016, preprint, (arXiv:1604.01781)
- Armstrong D. J., Osborn H. P., Brown D. J. A., Faedi F., Gómez Maqueo Chew Y., Martin D. V., Pollacco D., Udry S., 2014, *MNRAS*, 444, 1873
- Baganoff F. K., et al., 2001, *Nature*, 413, 45
- Baganoff F. K., et al., 2003, *ApJ*, 591, 891
- Bahcall J. N., Wolf R. A., 1976, *ApJ*, 209, 214
- Bahcall J. N., Wolf R. A., 1977, *ApJ*, 216, 883
- Bar-Or B., Kupi G., Alexander T., 2013, *ApJ*, 764, 52
- Barker A. J., Ogilvie G. I., 2009, *MNRAS*, 395, 2268
- Barrière N. M., et al., 2014, *ApJ*, 786, 46
- Bartko H., et al., 2009, *ApJ*, 697, 1741
- Bartko H., et al., 2010, *ApJ*, 708, 834
- Batygin K., Bodenheimer P. H., Laughlin G. P., 2015, preprint, (arXiv:1511.09157)



- Belorizsky D., 1930, *Bulletin Astronomique* 6, pp 417–434
- Berukoff S. J., Hansen B. M. S., 2006, *ApJ*, 650, 901
- Beuermann K., et al., 2011, *A&A*, 526, A53
- Binney J., Tremaine S., 2008, *Galactic Dynamics: Second Edition*. Princeton University Press
- Blaes O., Lee M. H., Socrates A., 2002, *ApJ*, 578, 775
- Blum R. D., Ramírez S. V., Sellgren K., Olsen K., 2003, *ApJ*, 597, 323
- Bodenheimer P., Hubickyj O., Lissauer J. J., 2000, *Icarus*, 143, 2
- Boekholt T., Portegies Zwart S., 2015, *Computational Astrophysics and Cosmology*, 2, 2
- Bonfils X., et al., 2013, *A&A*, 549, A109
- Boué G., Fabrycky D. C., 2014, *ApJ*, 789, 110
- Bowler B. P., Liu M. C., Kraus A. L., Mann A. W., 2014, *ApJ*, 784, 65
- Breiter S., Ratajczak R., 2005, *MNRAS*, 364, 1222
- Brem P., Amaro-Seoane P., Sopena C. F., 2014, *MNRAS*, 437, 1259
- Bromley B. C., Kenyon S. J., 2015, *ApJ*, 806, 98
- Brouwer D., 1959, *AJ*, 64, 378
- Bryan M. L., et al., 2016, *ApJ*, 821, 89
- Buchholz R. M., Schödel R., Eckart A., 2009, *A&A*, 499, 483
- Burgay M., et al., 2003, *Nature*, 426, 531
- Chatterjee S., Ford E. B., Matsumura S., Rasio F. A., 2008, *ApJ*, 686, 580
- Chen X., Amaro-Seoane P., 2014, *ApJ*, 786, L14
- Chirikov B. V., 1979, *Phys. Rep.*, 52, 263
- Cohen S. D., Hindmarsh A. C., Dubois P. F., 1996, *Computers in Physics*, 10, 138
- Cohn H., 1979, *ApJ*, 234, 1036
- Cohn H., Kulsrud R. M., 1978, *ApJ*, 226, 1087
- Conroy K. E., Prša A., Stassun K. G., Orosz J. A., Fabrycky D. C., Welsh W. F., 2014, *AJ*, 147, 45
- Correia A. C. M., Laskar J., Farago F., Boué G., 2011, *Celestial Mechanics and Dynamical Astronomy*, 111, 105
- Damour T., Deruelle N., 1981, *Physics Letters A*, 87, 81
- Do T., Ghez A. M., Morris M. R., Lu J. R., Matthews K., Yelda S., Larkin J., 2009, *ApJ*, 703, 1323
- Do T., et al., 2013, *ApJ*, 779, L6
- Dobbs-Dixon I., Lin D. N. C., Mardling R. A., 2004, *ApJ*, 610, 464
- Dodds-Eden K., et al., 2011, *ApJ*, 728, 37
- Doyle L. R., et al., 2011, *Science*, 333, 1602
- Duquennoy A., Mayor M., 1991, *A&A*, 248, 485
- Dvorak R., 1982, *Oesterreichische Akademie Wissenschaften Mathematisch naturwissenschaftliche Klasse Sitzungsberichte*, 191, 423
- Eckart A., Genzel R., Hofmann R., Sams B. J., Tacconi-Garman L. E., 1993, *ApJ*, 407, L77
- Eddington A. S., 1916, *MNRAS*, 76, 572
- Eggleton P. P., Kiseleva-Eggleton L., 2001, *ApJ*, 562, 1012
- Eggleton P. P., Kiseleva-Eggleton L., 2006, *Ap&SS*, 304, 75
- Eggleton P. P., Kiseleva L. G., Hut P., 1998, *ApJ*, 499, 853
- Eilon E., Kupi G., Alexander T., 2009, *ApJ*, 698, 641
- Einstein A., Infeld L., Hoffmann B., 1938, *Annals of Mathematics*, 39, 65
- Eisenhauer F., et al., 2005, *ApJ*, 628, 246
- Evans D. S., 1968, *QJRAS*, 9, 388
- Fabrycky D., Tremaine S., 2007, *ApJ*, 669, 1298

- Feroz F., Hobson M. P., 2014, *MNRAS*, 437, 3540
- Ferrarese L., Merritt D., 2000, *ApJ*, 539, L9
- Ford E. B., Rasio F. A., 2008, *ApJ*, 686, 621
- Ford E. B., Kozinsky B., Rasio F. A., 2000, *ApJ*, 535, 385
- Frank J., Rees M. J., 1976, *MNRAS*, 176, 633
- Frost E. B., 1908, *Astronomische Nachrichten*, 177, 171
- Fujii M., Iwasawa M., Funato Y., Makino J., 2010, *ApJ*, 716, L80
- Funato Y., Hut P., McMillan S., Makino J., 1996, *AJ*, 112, 1697
- Gaburov E., Harfst S., Portegies Zwart S. F., 2009, *New A*, 14, 630
- Genzel R., Thatte N., Krabbe A., Kroker H., Tacconi-Garman L. E., 1996, *ApJ*, 472, 153
- Genzel R., Schödel R., Ott T., Eckart A., Alexander T., Lacombe F., Rouan D., Aschenbach B., 2003a, *Nature*, 425, 934
- Genzel R., et al., 2003b, *ApJ*, 594, 812
- Genzel R., Eisenhauer F., Gillessen S., 2010, *Reviews of Modern Physics*, 82, 3121
- Ghez A. M., et al., 2008, *ApJ*, 689, 1044
- Gillessen S., Eisenhauer F., Trippe S., Alexander T., Genzel R., Martins F., Ott T., 2009, *ApJ*, 692, 1075
- Goldreich P., Tremaine S., 1980, *ApJ*, 241, 425
- Goldstein H., 1975, *American Journal of Physics*, 43, 737
- Goldstein H., 1976, *American Journal of Physics*, 44, 1123
- Goldstein H., Poole C., Safko J., 2002, *Classical mechanics*
- Gomes R., Levison H. F., Tsiganis K., Morbidelli A., 2005, *Nature*, 435, 466
- Gonçalves Ferrari G., Boehholt T., Portegies Zwart S. F., 2014, *MNRAS*, 440, 719
- Goodman J., 1983, *ApJ*, 270, 700
- Guenther E. W., Hartmann M., Esposito M., Hatzes A. P., Cusano F., Gandolfi D., 2009, *A&A*, 507, 1659
- Guillochon J., Ramirez-Ruiz E., Lin D., 2011, *ApJ*, 732, 74
- Gürkan M. A., Hopman C., 2007, *MNRAS*, 379, 1083
- Guyer J. E., Wheeler D., Warren J. A., 2009, *Computing in Science & Engineering*, 11, 6
- Hamers A. S., Portegies Zwart S. F., 2016, *MNRAS*,
- Hamers A. S., Pols O. R., Claeys J. S. W., Nelemans G., 2013, *MNRAS*, 430, 2262
- Hamers A. S., Portegies Zwart S. F., Merritt D., 2014, *MNRAS*, 443, 355
- Hamers A. S., Perets H. B., Antonini F., Portegies Zwart S. F., 2015, *MNRAS*, 449, 4221
- Hamilton D. P., Burns J. A., 1992, *Icar*, 96, 43
- Hansen B. M. S., 2010, *ApJ*, 723, 285
- Hansen B. M. S., Milosavljević M., 2003, *ApJ*, 593, L77
- Harrington R. S., 1968, *AJ*, 73, 190
- Harrington R. S., 1969, *Celestial Mechanics*, 1, 200
- Hayashi C., 1981, *Progress of Theoretical Physics Supplement*, 70, 35
- Heggie D. C., 1975, *MNRAS*, 173, 729
- Heggie D. C., Hut P., McMillan S. L. W., 1996, *ApJ*, 467, 359
- Hills J. G., 1988, *Nature*, 331, 687
- Holman M. J., Wiegert P. A., 1999, *AJ*, 117, 621
- Holman M., Touma J., Tremaine S., 1997, *Nature*, 386, 254
- Hopman C., Alexander T., 2006a, *ApJ*, 645, 1152
- Hopman C., Alexander T., 2006b, *ApJ*, 645, L133
- Hulse R. A., Taylor J. H., 1975, *ApJ*, 195, L51
- Hurley J. R., Pols O. R., Tout C. A., 2000, *MNRAS*, 315, 543

- Hut P., 1981, *A&A*, 99, 126
- Hut P., 1983, *ApJ*, 268, 342
- Hut P., 1993, *ApJ*, 403, 256
- Hut P., Bahcall J. N., 1983, *ApJ*, 268, 319
- Hut P., Makino J., McMillan S., 1995, *ApJ*, 443, L93
- Innanen K. A., Zheng J. Q., Mikkola S., Valtonen M. J., 1997, *AJ*, 113, 1915
- Ito T., Tanikawa K., 2002, *MNRAS*, 336, 483
- Iwasawa M., An S., Matsubayashi T., Funato Y., Makino J., 2011, *ApJ*, 731, L9
- Jurić M., Tremaine S., 2008, *ApJ*, 686, 603
- Katz B., Dong S., 2012, preprint, (arXiv:1211.4584)
- Katz B., Dong S., Malhotra R., 2011, *Physical Review Letters*, 107, 181101
- Kepler J., 1609, *Astronomia nova*.
- Kidder L. E., 1995, *Phys. Rev. D*, 52, 821
- Kinoshita H., Nakai H., 1999, *Celestial Mechanics and Dynamical Astronomy*, 75, 125
- Kinoshita H., Nakai H., 2007, *Celestial Mechanics and Dynamical Astronomy*, 98, 67
- Kiseleva L. G., Eggleton P. P., Mikkola S., 1998, *MNRAS*, 300, 292
- Knutson H. A., et al., 2014, *ApJ*, 785, 126
- Kolmogorov A., 1933, *G. Ist. Ital. Attuari*, 4, 83
- Kostov V. B., McCullough P. R., Hinse T. C., Tsvetanov Z. I., Hébrard G., Díaz R. F., Deleuil M., Valenti J. A., 2013, *ApJ*, 770, 52
- Kostov V. B., et al., 2014, *ApJ*, 784, 14
- Kozai Y., 1962, *AJ*, 67, 591
- Kraus A. L., Ireland M. J., Cieza L. A., Hinkley S., Dupuy T. J., Bowler B. P., Liu M. C., 2014, *ApJ*, 781, 20
- Kustaanheimo P., Stiefel E. L., 1965, *J. Reine Angew. Math.*, 218, 204
- Kuzuhara M., Tamura M., Ishii M., Kudo T., Nishiyama S., Kandori R., 2011, *AJ*, 141, 119
- Lagrange J. L., 1781, *Première partie, Nouveaux Mémoires de l'Académie des Sciences et Belles-Lettres de Berlin*, p. 125
- Laplace P. S., 1784, *Mem. Acad. royale des Sciences de Paris, Oeuvres complètes*, XI 49
- Laskar J., 1994, *A&A*, 287, L9
- Laskar J., 2008, *Icarus*, 196, 1
- Laskar J., 2012, preprint, (arXiv:1209.5996)
- Laskar J., Boué G., 2010, *A&A*, 522, A60
- Laskar J., Gastineau M., 2009, *Nature*, 459, 817
- Lee M. H., Peale S. J., 2006, *Icarus*, 184, 573
- Lestrade J.-F., Morey E., Lassus A., Phou N., 2011, *A&A*, 532, A120
- Leung G. C. K., Lee M. H., 2013, *ApJ*, 763, 107
- Li G., Naoz S., Kocsis B., Loeb A., 2014a, *ApJ*, 785, 116
- Li G., Naoz S., Holman M., Loeb A., 2014b, *ApJ*, 791, 86
- Lidov M. L., 1962, *Planet. Space Sci.*, 9, 719
- Lin D. N. C., Papaloizou J., 1986, *ApJ*, 309, 846
- Lin D. N. C., Bodenheimer P., Richardson D. C., 1996, *Nature*, 380, 606
- Lithwick Y., Naoz S., 2011, *ApJ*, 742, 94
- Lithwick Y., Wu Y., 2011, *ApJ*, 739, 31
- Lithwick Y., Wu Y., 2014, *Proceedings of the National Academy of Science*, 111, 12610
- Lorentz H. A., Droste J., 1917, *Versl. K. Akad. Wetensch. Amsterdam*, 26, 392

- Lu J. R., Ghez A. M., Hornstein S. D., Morris M. R., Becklin E. E., Matthews K., 2009, *ApJ*, 690, 1463
- Ludendorff H., 1908, *Astronomische Nachrichten*, 177, 7
- Luo L., Katz B., Dong S., 2016, *MNRAS*, 458, 3060
- Madigan A.-M., Hopman C., Levin Y., 2011, *ApJ*, 738, 99
- Makino J., 1991, *ApJ*, 369, 200
- Mamajek E. E., Kenworthy M. A., Hinz P. M., Meyer M. R., 2010, *AJ*, 139, 919
- Maness H., et al., 2007, *ApJ*, 669, 1024
- Mardling R. A., 2013, *MNRAS*, 435, 2187
- Mardling R. A., Aarseth S. J., 2001, *MNRAS*, 321, 398
- Martin D. V., Triaud A. H. M. J., 2014, *A&A*, 570, A91
- Martin D. V., Triaud A. H. M. J., 2015, *MNRAS*, 449, 781
- Martin D. V., Mazeh T., Fabrycky D. C., 2015, *MNRAS*, 453, 3554
- Mazeh T., Shaham J., 1979, *A&A*, 77, 145
- Meibom S., Mathieu R. D., 2005, *ApJ*, 620, 970
- Merritt D., 2004, *Physical Review Letters*, 92, 201304
- Merritt D., 2010, *ApJ*, 718, 739
- Merritt D., 2013a, *Dynamics and Evolution of Galactic Nuclei*
- Merritt D., 2013b, *Dynamics and Evolution of Galactic Nuclei*
- Merritt D., Vasiliev E., 2012, *Physical Review D*, 86, 102002
- Merritt D., Harfst S., Bertone G., 2007, *Phys. Rev. D*, 75, 043517
- Merritt D., Alexander T., Mikkola S., Will C. M., 2011, *Phys. Rev. D*, 84, 044024
- Michael E., Perets H. B., Grishin E., 2015, preprint, (arXiv:1506.08818)
- Mikkola S., Aarseth S. J., 1993, *Celestial Mechanics and Dynamical Astronomy*, 57, 439
- Mikkola S., Aarseth S., 2002, *Celestial Mechanics and Dynamical Astronomy*, 84, 343
- Mikkola S., Merritt D., 2008, *AJ*, 135, 2398
- Mikkola S., Tanikawa K., 1999, *MNRAS*, 310, 745
- Milankovitch M., 1939, *Bull. Serb. Acad. Math. Nat.*, 6
- Milgrom M., 1983, *ApJ*, 270, 365
- Miller M. C., Hamilton D. P., 2002, *ApJ*, 576, 894
- Morbey C. L., Brosterhus E. B., 1974, *PASP*, 86, 455
- Morris M., 1993, *ApJ*, 408, 496
- Muñoz D. J., Lai D., 2015, *Proceedings of the National Academy of Science*, 112, 9264
- Murray C. D., Dermott S. F., 1999, *Solar system dynamics*
- Murray-Clay R. A., Loeb A., 2012, *Nature*, 3
- Musen P., 1961, *J. Geophys. Res.*, 66, 2797
- Naoz S., Fabrycky D. C., 2014, *ApJ*, 793, 137
- Naoz S., Farr W. M., Lithwick Y., Rasio F. A., Teyssandier J., 2011, *Nature*, 473, 187
- Naoz S., Farr W. M., Rasio F. A., 2012, *ApJ*, 754, L36
- Naoz S., Farr W. M., Lithwick Y., Rasio F. A., Teyssandier J., 2013a, *MNRAS*, 431, 2155
- Naoz S., Kocsis B., Loeb A., Yunes N., 2013b, *ApJ*, 773, 187
- Nayakshin S., Sazonov S., Sunyaev R., 2012, *MNRAS*, 419, 1238
- Neilsen J., et al., 2013, *ApJ*, 774, 42
- Newton I., 1687, *Philosophiae Naturalis Principia Mathematica*. Auctore Js. Newton, doi:10.3931/e-rara-440.
- Ngo H., et al., 2015, *ApJ*, 800, 138
- Nikołajuk M., Walter R., 2013, *A&A*, 552, A75

- Nitadori K., Makino J., 2008, *New A*, 13, 498
- Nugeyre J. B., Bouvier P., 1981, *Celestial Mechanics*, 25, 51
- Ogilvie G. I., Lin D. N. C., 2007, *ApJ*, 661, 1180
- Oh S., Kim S. S., Figer D. F., 2009, *Journal of Korean Astronomical Society*, 42, 17
- Ondra L., 2004, *S&T*, 108, 74
- Orosz J. A., et al., 2012a, *Science*, 337, 1511
- Orosz J. A., et al., 2012b, *ApJ*, 758, 87
- Paumard T., et al., 2006, *Journal of Physics Conference Series*, 54, 199
- Pejcha O., Antognini J. M., Shappee B. J., Thompson T. A., 2013, *MNRAS*, 435, 943
- Pelupessy F. I., Jänes J., Portegies Zwart S., 2012, *New A*, 17, 711
- Pelupessy F. I., van Elteren A., de Vries N., McMillan S. L. W., Drost N., Portegies Zwart S. F., 2013, *A&A*, 557, A84
- Perets H. B., 2009, *ApJ*, 690, 795
- Perets H. B., Fabrycky D. C., 2009, *ApJ*, 697, 1048
- Perets H. B., Gualandris A., 2010, *ApJ*, 719, 220
- Perets H. B., Naoz S., 2009, *ApJ*, 699, L17
- Perets H. B., Hopman C., Alexander T., 2007, *ApJ*, 656, 709
- Perets H. B., Gualandris A., Kupi G., Merritt D., Alexander T., 2009, *ApJ*, 702, 884
- Peters P. C., 1964, *Physical Review*, 136, 1224
- Petrovich C., 2015a, *ApJ*, 799, 27
- Petrovich C., 2015b, *ApJ*, 805, 75
- Petrovich C., Tremaine S., 2016, preprint, (arXiv:1604.00010)
- Pfuhl O., et al., 2011, *ApJ*, 741, 108
- Pickering E. C., 1890, *The Observatory*, 13, 80
- Porquet D., Predehl P., Aschenbach B., Grosso N., Goldwurm A., Goldoni P., Warwick R. S., Decourchelle A., 2003, *A&A*, 407, L17
- Portegies Zwart S. F., Verbunt F., 1996, *A&A*, 309, 179
- Portegies Zwart S. F., McMillan S. L. W., Hut P., Makino J., 2001, *MNRAS*, 321, 199
- Portegies Zwart S., McMillan S. L. W., van Elteren E., Pelupessy I., de Vries N., 2013, *Computer Physics Communications*, 183, 456
- Prodan S., Murray N., Thompson T. A., 2013, preprint, (arXiv:1305.2191)
- Qian S.-B., Liao W.-P., Zhu L.-Y., Dai Z.-B., 2010, *ApJ*, 708, L66
- Raghavan D., et al., 2010, *ApJS*, 190, 1
- Rappaport S., Deck K., Levine A., Borkovits T., Carter J., El Mellah I., Sanchis-Ojeda R., Kalomeni B., 2013, *ApJ*, 768, 33
- Rasio F. A., Ford E. B., 1996, *Science*, 274, 954
- Rauch K. P., Tremaine S., 1996, *New A*, 1, 149
- Riddle R. L., et al., 2015, *ApJ*, 799, 4
- Roberts Jr. L. C., Tokovinin A., Mason B. D., Riddle R. L., Hartkopf W. I., Law N. M., Baranec C., 2015, *AJ*, 149, 118
- Roell T., Neuhäuser R., Seifahrt A., Mugrauer M., 2012, *A&A*, 542, A92
- Rosenbluth M. N., MacDonald W. M., Judd D. L., 1957, *Phys. Rev.*, 107, 1
- Rosengren A. J., Scheeres D. J., 2014, *Celestial Mechanics and Dynamical Astronomy*, 118, 197
- Rubin V. C., Ford W. K. J., Thonnard N., 1980, *ApJ*, 238, 471
- Salpeter E. E., 1955, *ApJ*, 121, 161
- Santerne A., et al., 2016, *A&A*, 587, A64

- Schödel R., et al., 2007, *A&A*, 469, 125
- Schödel R., Merritt D., Eckart A., 2009, *A&A*, 502, 91
- Schödel R., Feldmeier A., Kunneriath D., Stolovy S., Neumayer N., Amaro-Seoane P., Nishiyama S., 2014, *A&A*, 566, A47
- Schwamb M. E., et al., 2013, *ApJ*, 768, 127
- Schwarzschild K., 1916, *Abh. Konigl. Preuss. Akad. Wissenschaften Jahre 1906,92*, Berlin, 1907, 1916, 189
- Schwope A. D., Hambaryan V., Schwarz R., Kanbach G., Gänsicke B. T., 2002, *A&A*, 392, 541
- Sepinsky J. F., Willems B., Kalogera V., 2007, *ApJ*, 660, 1624
- Shen Z.-Q., Lo K. Y., Liang M.-C., Ho P. T. P., Zhao J.-H., 2005, *Nature*, 438, 62
- Siebert H., 2005, *Journal for the History of Astronomy*, 36, 251
- Sigurdsson S., Rees M. J., 1997, *MNRAS*, 284, 318
- Skumanich A., 1972, *ApJ*, 171, 565
- Smirnov N., 1948, *Annals of Mathematical Statistics*, 19, 279
- Socrates A., Katz B., 2012, preprint, (arXiv:1209.5723)
- Socrates A., Katz B., Dong S., 2012, preprint, (arXiv:1209.5724)
- Spitzer L., 1987, *Dynamical evolution of globular clusters*
- Storch N. I., Lai D., 2015, *MNRAS*, 448, 1821
- Storch N. I., Anderson K. R., Lai D., 2014, *Science*, 345, 1317
- Sundman K. F., 1912, *Acta Math.*, 36, 105
- Takeda G., Rasio F. A., 2005, *ApJ*, 627, 1001
- Takeda G., Kita R., Rasio F. A., 2008, *ApJ*, 683, 1063
- Tanaka H., Takeuchi T., Ward W. R., 2002, *ApJ*, 565, 1257
- Teysandier J., Naoz S., Lizarraga I., Rasio F. A., 2013, *ApJ*, 779, 166
- Thompson T. A., 2011, *ApJ*, 741, 82
- Tokovinin A., 2014a, *AJ*, 147, 86
- Tokovinin A., 2014b, *AJ*, 147, 87
- Tokovinin A., Thomas S., Sterzik M., Udry S., 2006, *A&A*, 450, 681
- Tokovinin A., Gorynya N. A., Morrell N. I., 2014, *MNRAS*, 443, 3082
- Toonen S., Nelemans G., Portegies Zwart S., 2012, *A&A*, 546, A70
- Touma J. R., Tremaine S., Kazandjian M. V., 2009, *MNRAS*, 394, 1085
- Tremaine S., Touma J., Namouni F., 2009, *AJ*, 137, 3706
- Trippe S., et al., 2008, *A&A*, 492, 419
- Verbunt F., Zwaan C., 1981, *A&A*, 100, L7
- Vika M., Driver S. P., Graham A. W., Liske J., 2009, *MNRAS*, 400, 1451
- Wahba G., ed. 1990, *Spline models for observational data*
- Walker I. W., 1983, *Celestial Mechanics*, 29, 149
- Wang Q.-D., 1991, *Celestial Mechanics and Dynamical Astronomy*, 50, 73
- Weinberg S., 1972, *Gravitation and Cosmology: Principles and Applications of the General Theory of Relativity*
- Welsh W. F., et al., 2012, *Nature*, 481, 475
- Welsh W. F., et al., 2015, *ApJ*, 809, 26
- Will C. M., 2012, *Classical and Quantum Gravity*, 29, 217001
- Will C. M., 2014a, *Classical and Quantum Gravity*, 31, 244001
- Will C. M., 2014b, *Phys. Rev. D*, 89, 044043
- Winn J. N., Fabrycky D. C., 2015, *ARA&A*, 53, 409

- Wright J. T., Marcy G. W., Howard A. W., Johnson J. A., Morton T. D., Fischer D. A., 2012, *ApJ*, 753, 160
- Wu Y., Lithwick Y., 2011, *ApJ*, 735, 109
- Wu Y., Murray N., 2003, *ApJ*, 589, 605
- Wu Y., Murray N. W., Ramsahai J. M., 2007, *ApJ*, 670, 820
- Wyatt M. C., 2008, *ARA&A*, 46, 339
- Zimmerman N., et al., 2010, *ApJ*, 709, 733
- Zubovas K., Nayakshin S., Markoff S., 2012, *MNRAS*, 421, 1315
- Zwicky F., 1933, *Helvetica Physica Acta*, 6, 110
- van Kampen N. G., 1992, *Stochastic Processes in Physics and Chemistry*. Elsevier Science, Amsterdam
- van den Berk J., Portegies Zwart S. F., McMillan S. L. W., 2007, *MNRAS*, 379, 111