

# Publication List - Paul McMillan

Lund Observatory ◇ paul@astro.lu.se

12199 total citations ◇ 1338 citations as first author

## Key Publications

1. “Distances and parallax bias in Gaia DR2”, Schönrich, R., **Paul McMillan** & Eyer, L., 2019, MNRAS, 487, 3568. (*Citations to date 69*)
2. “Gaia Data Release 2. Kinematics of globular clusters and dwarf galaxies around the Milky Way”, Gaia Collaboration, Helmi, A., van Leeuwen, F., **Paul McMillan**, et al., 2018, A&A, 616, A12. (*Citations to date 277*)
3. “Improved distances and ages for stars common to TGAS and RAVE”, **Paul McMillan**, Kordopatis, G., Kunder, A., Binney, J., et al., 2018, MNRAS, 477, 5279. (*Citations to date 37*)
4. “Understanding inverse metallicity gradients in galactic discs as a consequence of inside-out formation”, Schönrich, R. & **Paul McMillan**, 2017, MNRAS, 467, 1154. (*Citations to date 53*)
5. “The mass distribution and gravitational potential of the Milky Way”, **Paul McMillan**, 2017, MNRAS, 465, 76. (*Citations to date 255*)
6. “The Radial Velocity Experiment (RAVE): Fifth Data Release”, Kunder, A., Kordopatis, G., Steinmetz, M., Zwitter, T., et al. (including **Paul McMillan**), 2017, AJ, 153, 75. (*Citations to date 282*)
7. “Torus mapper: a code for dynamical models of galaxies”, Binney, J. & **Paul McMillan**, 2016, MNRAS, 456, 1982. (*Citations to date 28*)
8. “Constraining the Galaxy’s dark halo with RAVE stars”, Piffl, T., Binney, J., **Paul McMillan**, Steinmetz, M., et al., 2014, MNRAS, 445, 3133. (*Citations to date 120*)
9. “Analysing surveys of our Galaxy - II. Determining the potential”, **Paul McMillan** & Binney, J., 2013, MNRAS, 433, 1411. (*Citations to date 27*)
10. “Extending the Hyades”, **Paul McMillan**, 2013, MNRAS, 430, 3276. (*Citations to date 21*)
11. “Mass models of the Milky Way”, **Paul McMillan**, 2011, MNRAS, 414, 2446. (*Citations to date 513*)
12. “Models of our Galaxy - II”, Binney, J. & **Paul McMillan**, 2011, MNRAS, 413, 1889. (*Citations to date 90*)
13. “The uncertainty in Galactic parameters”, **Paul McMillan** & Binney, J., 2010, MNRAS, 402, 934. (*Citations to date 214*)
14. “Disassembling the Galaxy with angle-action coordinates”, **Paul McMillan** & Binney, J., 2008, MNRAS, 390, 429. (*Citations to date 58*)
15. “Initial conditions for disc galaxies”, **Paul McMillan** & Dehnen, W., 2007, MNRAS, 378, 541. (*Citations to date 84*)
16. “Halo evolution in the presence of a disc bar”, **Paul McMillan** & Dehnen, W., 2005, MNRAS, 363, 1205. (*Citations to date 36*)

## Other Publications

18. “The Sixth Data Release of the Radial Velocity Experiment (RAVE). II. Stellar Atmospheric Parameters, Chemical Abundances, and Distances”, Steinmetz, M., Guiglion, G., **Paul McMillan**, Matijević, G., et al., 2020, AJ, 160, 83. (*Citations to date 5*)
19. “The Sixth Data Release of the Radial Velocity Experiment (RAVE). I. Survey Description, Spectra, and Radial Velocities”, Steinmetz, M., Matijević, G., Enke, H., Zwitter, T., et al. (including **Paul McMillan**), 2020, AJ, 160, 82. (*Citations to date 6*)
20. “Radial migration and vertical action in N-body simulations”, Mikkola, D., **Paul McMillan** & Hobbs, D., 2020, MNRAS, 495, 3295. (*Citations to date 1*)
21. “The RAdial Velocity Experiment: Parameterization of RAVE spectra based on Convolutional Neural Network”, Guiglion, G., Matijevic, G., Queiroz, A., Valentini, M., et al. (including **Paul McMillan**), 2020, arXiv:2004.12666. (*Citations to date 1*)
22. “Kinematics with Gaia DR2: the force of a dwarf”, Carrillo, I., Minchev, I., Steinmetz, M., Monari, G., et al. (including **Paul McMillan**), 2019, MNRAS, 490, 797. (*Citations to date 17*)
23. “Voyage 2050 White Paper: All-Sky Visible and Near Infrared Space Astrometry”, Hobbs, D., Brown, A., Høg, E., Jordi, C., et al. (including **Paul McMillan**), 2019, arXiv:1907.12535. (*Citations to date 3*)
24. “Radial abundance gradients in the outer Galactic disk as traced by main-sequence OB stars”, Bragança, G., Daflon, S., Lanz, T., Cunha, K., et al. (including **Paul McMillan**), 2019, A&A, 625, A120. (*Citations to date 3*)
25. “4MOST Consortium Survey 4: Milky Way Disc and Bulge High-Resolution Survey (4MIDABLE-HR)”, Bensby, T., Bergemann, M., Rybizki, J., Lemasle, B., et al. (including **Paul McMillan**), 2019, Msngr, 175, 35. (*Citations to date 9*)
26. “4MOST: Project overview and information for the First Call for Proposals”, de Jong, R., Agertz, O., Berbel, A., Aird, J., et al. (including **Paul McMillan**), 2019, Msngr, 175, 3. (*Citations to date 59*)
27. “4MOST Consortium Survey 3: Milky Way Disc and Bulge Low-Resolution Survey (4MIDABLE-LR)”, Chiappini, C., Minchev, I., Starkenburg, E., Anders, F., et al. (including **Paul McMillan**), 2019, Msngr, 175, 30. (*Citations to date 11*)
28. “Gaia Data Release 2. Variable stars in the colour-absolute magnitude diagram”, Gaia Collaboration, Eyer, L., Rimoldini, L., Audard, M., et al. (including **Paul McMillan**), 2019, A&A, 623, A110. (*Citations to date 54*)
29. “Spiral arm crossings inferred from ridges in Gaia stellar velocity distributions”, Quillen, A., Carrillo, I., Anders, F., **Paul McMillan**, et al., 2018, MNRAS, 480, 3132. (*Citations to date 29*)
30. “Gaia Data Release 2. The celestial reference frame (Gaia-CRF2)”, Gaia Collaboration, Mignard, F., Klioner, S., Lindegren, L., et al. (including **Paul McMillan**), 2018, A&A, 616, A14. (*Citations to date 78*)
31. “Gaia Data Release 2. Observations of solar system objects”, Gaia Collaboration, Spoto, F., Tanga, P., Mignard, F., et al. (including **Paul McMillan**), 2018, A&A, 616, A13. (*Citations to date 33*)
32. “Gaia Data Release 2. Observational Hertzsprung-Russell diagrams”, Gaia Collaboration, Babusiaux, C., van Leeuwen, F., Barstow, M., et al. (including **Paul McMillan**), 2018, A&A, 616, A10. (*Citations to date 304*)

33. “Gaia Data Release 2. The astrometric solution”, Lindegren, L., Hernández, J., Bombrun, A., Klioner, S., et al. (including **Paul McMillan**), 2018, A&A, 616, A2. (*Citations to date 929*)
34. “Gaia Data Release 2. Mapping the Milky Way disc kinematics”, Gaia Collaboration, Katz, D., Antoja, T., Romero-Gómez, M., et al. (including **Paul McMillan**), 2018, A&A, 616, A11. (*Citations to date 165*)
35. “Gaia Data Release 2. Summary of the contents and survey properties”, Gaia Collaboration, Brown, A., Vallenari, A., Prusti, T., et al. (including **Paul McMillan**), 2018, A&A, 616, A1. (*Citations to date 3310*)
36. “Correlations between age, kinematics, and chemistry as seen by the RAVE survey”, Wojno, J., Kordopatis, G., Steinmetz, M., **Paul McMillan**, et al., 2018, MNRAS, 477, 5612. (*Citations to date 8*)
37. “Simple Distance Estimates for Gaia DR2 Stars with Radial Velocities”, **Paul McMillan**, 2018, RNAAS, 2, 51. (*Citations to date 15*)
38. “Coma Berenices: The First Evidence for Incomplete Vertical Phase-mixing in Local Velocity Space with RAVE—Confirmed with Gaia DR2”, Monari, G., Famaey, B., Minchev, I., Antoja, T., et al. (including **Paul McMillan**), 2018, RNAAS, 2, 32. (*Citations to date 13*)
39. “Gaia DR2 Confirms that Candidate Thorne-Żytkow Object HV 2112 is in the Small Magellanic Cloud”, **Paul McMillan** & Church, R., 2018, RNAAS, 2, 18.
40. “Is the Milky Way still breathing? RAVE-Gaia streaming motions”, Carrillo, I., Minchev, I., Kordopatis, G., Steinmetz, M., et al. (including **Paul McMillan**), 2018, MNRAS, 475, 2679. (*Citations to date 32*)
41. “Climbing the cosmic ladder with stellar twins in RAVE with Gaia”, Jofré, P., Traven, G., Hawkins, K., Gilmore, G., et al. (including **Paul McMillan**), 2017, MNRAS, 472, 2517. (*Citations to date 7*)
42. “Gaia Data Release 1. Testing parallaxes with local Cepheids and RR Lyrae stars”, Gaia Collaboration, Clementini, G., Eyer, L., Ripepi, V., et al. (including **Paul McMillan**), 2017, A&A, 605, A79. (*Citations to date 62*)
43. “The selection function of the RAVE survey”, Wojno, J., Kordopatis, G., Piffl, T., Binney, J., et al. (including **Paul McMillan**), 2017, MNRAS, 468, 3368. (*Citations to date 32*)
44. “Gaia Data Release 1. Open cluster astrometry: performance, limitations, and future prospects”, Gaia Collaboration, van Leeuwen, F., Vallenari, A., Jordi, C., et al. (including **Paul McMillan**), 2017, A&A, 601, A19. (*Citations to date 65*)
45. “RAVE stars in K2. I. Improving RAVE red giants spectroscopy using asteroseismology from K2 Campaign 1”, Valentini, M., Chiappini, C., Davies, G., Elsworth, Y., et al. (including **Paul McMillan**), 2017, A&A, 600, A66. (*Citations to date 28*)
46. “On the metallicity dependence of the [Y/Mg]-age relation for solar-type stars”, Feltzing, S., Howes, L., **Paul McMillan** & Stonkutė, E., 2017, MNRAS, 465, L109. (*Citations to date 32*)
47. “The Gaia mission”, Gaia Collaboration, Prusti, T., de Bruijne, J., Brown, A., et al. (including **Paul McMillan**), 2016, A&A, 595, A1. (*Citations to date 2139*)
48. “Gaia Data Release 1. Astrometry: one billion positions, two million proper motions and parallaxes”, Lindegren, L., Lammers, U., Bastian, U., Hernández, J., et al. (including **Paul McMillan**), 2016, A&A, 595, A4. (*Citations to date 550*)
49. “Gaia Data Release 1. Summary of the astrometric, photometric, and survey properties”, Gaia Collaboration, Brown, A., Vallenari, A., Prusti, T., et al. (including **Paul McMillan**), 2016,

50. “Gaia Data Release 1. Pre-processing and source list creation”, Fabricius, C., Bastian, U., Portell, J., Castañeda, J., et al. (including **Paul McMillan**), 2016, A&A, 595, A3. (*Citations to date 61*)
51. “Chemical separation of disc components using RAVE”, Wojno, J., Kordopatis, G., Steinmetz, M., **Paul McMillan**, et al., 2016, MNRAS, 461, 4246. (*Citations to date 27*)
52. “GaiaNIR: Combining optical and Near-Infra-Red (NIR) capabilities with Time-Delay-Integration (TDI) sensors for a future Gaia-like mission”, Hobbs, D., Høg, E., Mora, A., Crowley, C., et al. (including **Paul McMillan**), 2016, arXiv:1609.07325. (*Citations to date 25*)
53. “Identification of globular cluster stars in RAVE data - I. Application to stellar parameter calibration”, Anguiano, B., Zucker, D., Scholz, R., Grebel, E., et al. (including **Paul McMillan**), 2015, MNRAS, 451, 1229. (*Citations to date 17*)
54. “The Gaia-ESO Survey: a quiescent Milky Way with no significant dark/stellar accreted disc”, Ruchti, G., Read, J., Feltzing, S., Serenelli, A., et al. (including **Paul McMillan**), 2015, MNRAS, 450, 2874. (*Citations to date 40*)
55. “The rich are different: evidence from the RAVE survey for stellar radial migration”, Kordopatis, G., Binney, J., Gilmore, G., Wyse, R., et al. (including **Paul McMillan**), 2015, MNRAS, 447, 3526. (*Citations to date 54*)
56. “New distances to RAVE stars”, Binney, J., Burnett, B., Kordopatis, G., **Paul McMillan**, et al., 2014, MNRAS, 437, 351. (*Citations to date 91*)
57. “In the thick of it: metal-poor disc stars in RAVE”, Kordopatis, G., Gilmore, G., Wyse, R., Steinmetz, M., et al. (including **Paul McMillan**), 2013, MNRAS, 436, 3231. (*Citations to date 51*)
58. “The Radial Velocity Experiment (RAVE): Fourth Data Release”, Kordopatis, G., Gilmore, G., Steinmetz, M., Boeche, C., et al. (including **Paul McMillan**), 2013, AJ, 146, 134. (*Citations to date 254*)
59. “Analysing surveys of our Galaxy - I. Basic astrometric data”, **Paul McMillan** & Binney, J., 2012, MNRAS, 419, 2251. (*Citations to date 27*)
60. “The solar neighbourhood in angle coordinates: the Hyades moving group”, **Paul McMillan**, 2011, MNRAS, 418, 1565. (*Citations to date 25*)
61. “The dangers of deprojection of proper motions”, **Paul McMillan** & Binney, J., 2009, MNRAS, 400, L103. (*Citations to date 11*)
62. “The haloes of merger remnants”, **Paul McMillan**, Athanassoula, E. & Dehnen, W., 2007, MNRAS, 376, 1261. (*Citations to date 15*)