## PUBLICATION LIST - PAUL MCMILLAN

Lund Observatory  $\diamond$  paul@astro.lu.se 9184 total citations  $\diamond$  1187 citations as first author

## **Key Publications**

- 1. "Distances and parallax bias in Gaia DR2", Schönrich, R., **Paul J. McMillan** & Eyer, L., 2019, MNRAS, 487, 3568. (Citations to date 27.)
- 2. "Gaia Data Release 2. Kinematics of globular clusters and dwarf galaxies around the Milky Way", Gaia Collaboration, Helmi, A., van Leeuwen, F., **Paul J. McMillan**, et al., 2018, A&A, 616, A12. (Citations to date 186.)
- 3. "Improved distances and ages for stars common to TGAS and RAVE", **Paul J. McMillan**, Kordopatis, G., Kunder, A., Binney, J., et al., 2018, MNRAS, 477, 5279. (Citations to date 34.)
- 4. "Understanding inverse metallicity gradients in galactic discs as a consequence of inside-out formation", Schönrich, R. & Paul J. McMillan, 2017, MNRAS, 467, 1154. (Citations to date 41.)
- 5. "The mass distribution and gravitational potential of the Milky Way", **Paul J. McMillan**, 2017, MNRAS, 465, 76. (Citations to date 179.)
- "The Radial Velocity Experiment (RAVE): Fifth Data Release", Kunder, A., Kordopatis, G., Steinmetz, M., Zwitter, T., et al. (including Paul J. McMillan), 2017, AJ, 153, 75. (Citations to date 245.)
- 7. "Torus mapper: a code for dynamical models of galaxies", Binney, J. & Paul J. McMillan, 2016, MNRAS, 456, 1982. (Citations to date 25.)
- 8. "Constraining the Galaxy's dark halo with RAVE stars", Piffl, T., Binney, J., Paul J. McMillan, Steinmetz, M., et al., 2014, MNRAS, 445, 3133. (Citations to date 111.)
- 9. "Analysing surveys of our Galaxy II. Determining the potential", **Paul J. McMillan** & Binney, J., 2013, MNRAS, 433, 1411. (Citations to date 26.)
- 10. "Extending the Hyades", Paul J. McMillan, 2013, MNRAS, 430, 3276. (Citations to date 20.)
- 11. "Mass models of the Milky Way", **Paul J. McMillan**, 2011, MNRAS, 414, 2446. (Citations to date 469.)
- 12. "Models of our Galaxy II", Binney, J. & Paul J. McMillan, 2011, MNRAS, 413, 1889. (Citations to date 87.)
- 13. "The uncertainty in Galactic parameters", **Paul J. McMillan** & Binney, J., 2010, MNRAS, 402, 934. (Citations to date 210.)
- 14. "Disassembling the Galaxy with angle-action coordinates", **Paul J. McMillan** & Binney, J., 2008, MNRAS, 390, 429. (Citations to date 54.)
- 15. "Initial conditions for disc galaxies", **Paul J. McMillan** & Dehnen, W., 2007, MNRAS, 378, 541. (Citations to date 76.)
- 16. "Halo evolution in the presence of a disc bar", **Paul J. McMillan** & Dehnen, W., 2005, MNRAS, 363, 1205. (Citations to date 35.)

## Other Publications

- "Kinematics with Gaia DR2: the force of a dwarf", Carrillo, I., Minchev, I., Steinmetz, M., Monari, G., et al. (including Paul J. McMillan), 2019, MNRAS, 490, 797. (Citations to date 1.)
- 2. "Voyage 2050 White Paper: All-Sky Visible and Near Infrared Space Astrometry", Hobbs, D., Brown, A., Høg, E., Jordi, C., et al. (including **Paul J. McMillan**), 2019, arXiv:1907.12535.
- 3. "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 J. McMillan**), 2019, A&A, 625, A120. (Citations to date 1.)
- 4. "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 J. McMillan**), 2019, Msngr, 175, 35. (Citations to date 2.)
- 5. "4MOST: Project overview and information for the First Call for Proposals", de Jong, R., Agertz, O., Berbel, A., Aird, J., et al. (including **Paul J. McMillan**), 2019, Msngr, 175, 3. (Citations to date 21.)
- 6. "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 J. McMillan**), 2019, Msngr, 175, 30. (Citations to date 4.)
- 7. "Gaia Data Release 2. Variable stars in the colour-absolute magnitude diagram", Gaia Collaboration, Eyer, L., Rimoldini, L., Audard, M., et al. (including **Paul J. McMillan**), 2019, A&A, 623, A110. (Citations to date 34.)
- 8. "Spiral arm crossings inferred from ridges in Gaia stellar velocity distributions", Quillen, A., Carrillo, I., Anders, F., **Paul J. McMillan**, et al., 2018, MNRAS, 480, 3132. (Citations to date 21.)
- 9. "Gaia Data Release 2. The celestial reference frame (Gaia-CRF2)", Gaia Collaboration, Mignard, F., Klioner, S., Lindegren, L., et al. (including **Paul J. McMillan**), 2018, A&A, 616, A14. (Citations to date 40.)
- 10. "Gaia Data Release 2. Observations of solar system objects", Gaia Collaboration, Spoto, F., Tanga, P., Mignard, F., et al. (including **Paul J. McMillan**), 2018, A&A, 616, A13. (Citations to date 22.)
- 11. "Gaia Data Release 2. Observational Hertzsprung-Russell diagrams", Gaia Collaboration, Babusiaux, C., van Leeuwen, F., Barstow, M., et al. (including **Paul J. McMillan**), 2018, A&A, 616, A10. (Citations to date 221.)
- 12. "Gaia Data Release 2. The astrometric solution", Lindegren, L., Hernández, J., Bombrun, A., Klioner, S., et al. (including **Paul J. McMillan**), 2018, A&A, 616, A2. (Citations to date 619.)
- 13. "Gaia Data Release 2. Mapping the Milky Way disc kinematics", Gaia Collaboration, Katz, D., Antoja, T., Romero-Gómez, M., et al. (including **Paul J. McMillan**), 2018, A&A, 616, A11. (Citations to date 113.)
- 14. "Gaia Data Release 2. Summary of the contents and survey properties", Gaia Collaboration, Brown, A., Vallenari, A., Prusti, T., et al. (including **Paul J. McMillan**), 2018, A&A, 616, A1. (Citations to date 2096.)
- 15. "Correlations between age, kinematics, and chemistry as seen by the RAVE survey", Wojno, J., Kordopatis, G., Steinmetz, M., Paul J. McMillan, et al., 2018, MNRAS, 477, 5612. (Citations to date 6.)

- 16. "Simple Distance Estimates for Gaia DR2 Stars with Radial Velocities", **Paul J. McMillan**, 2018, RNAAS, 2, 51. (Citations to date 10.)
- 17. "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 J. McMillan**), 2018, RNAAS, 2, 32. (Citations to date 11.)
- 18. "Gaia DR2 Confirms that Candidate Thorne-Zytkow Object HV 2112 is in the Small Magellanic Cloud", **Paul J. McMillan** & Church, R., 2018, RNAAS, 2, 18.
- 19. "Is the Milky Way still breathing? RAVE-Gaia streaming motions", Carrillo, I., Minchev, I., Kordopatis, G., Steinmetz, M., et al. (including **Paul J. McMillan**), 2018, MNRAS, 475, 2679. (Citations to date 27.)
- 20. "Climbing the cosmic ladder with stellar twins in RAVE with Gaia", Jofré, P., Traven, G., Hawkins, K., Gilmore, G., et al. (including **Paul J. McMillan**), 2017, MNRAS, 472, 2517. (Citations to date 7.)
- 21. "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 J. McMillan**), 2017, A&A, 605, A79. (Citations to date 49.)
- 22. "The selection function of the RAVE survey", Wojno, J., Kordopatis, G., Piffl, T., Binney, J., et al. (including **Paul J. McMillan**), 2017, MNRAS, 468, 3368. (Citations to date 29.)
- 23. "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 J. McMillan**), 2017, A&A, 601, A19. (Citations to date 62.)
- 24. "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 J. McMillan**), 2017, A&A, 600, A66. (Citations to date 24.)
- 25. "On the metallicity dependence of the [Y/Mg]-age relation for solar-type stars", Feltzing, S., Howes, L., **Paul J. McMillan** & Stonkutė, E., 2017, MNRAS, 465, L109. (Citations to date 21.)
- 26. "The Gaia mission", Gaia Collaboration, Prusti, T., de Bruijne, J., Brown, A., et al. (including Paul J. McMillan), 2016, A&A, 595, A1. (Citations to date 1602.)
- 27. "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 J. McMillan**), 2016, A&A, 595, A4. (Citations to date 513.)
- 28. "Gaia Data Release 1. Summary of the astrometric, photometric, and survey properties", Gaia Collaboration, Brown, A., Vallenari, A., Prusti, T., et al. (including **Paul J. McMillan**), 2016, A&A, 595, A2. (Citations to date 1170.)
- 29. "Gaia Data Release 1. Pre-processing and source list creation", Fabricius, C., Bastian, U., Portell, J., Castañeda, J., et al. (including **Paul J. McMillan**), 2016, A&A, 595, A3. (Citations to date 56.)
- 30. "Chemical separation of disc components using RAVE", Wojno, J., Kordopatis, G., Steinmetz, M., Paul J. McMillan, et al., 2016, MNRAS, 461, 4246. (Citations to date 21.)
- 31. "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 J. McMillan**), 2016, arXiv:1609.07325. (Citations to date 16.)

- 32. "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 J. McMillan**), 2015, MNRAS, 451, 1229. (Citations to date 16.)
- 33. "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 J. McMillan**), 2015, MNRAS, 450, 2874. (Citations to date 35.)
- 34. "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 J. McMillan**), 2015, MNRAS, 447, 3526. (Citations to date 47.)
- 35. "New distances to RAVE stars", Binney, J., Burnett, B., Kordopatis, G., Paul J. McMillan, et al., 2014, MNRAS, 437, 351. (Citations to date 85.)
- 36. "In the thick of it: metal-poor disc stars in RAVE", Kordopatis, G., Gilmore, G., Wyse, R., Steinmetz, M., et al. (including **Paul J. McMillan**), 2013, MNRAS, 436, 3231. (Citations to date 46.)
- 37. "The Radial Velocity Experiment (RAVE): Fourth Data Release", Kordopatis, G., Gilmore, G., Steinmetz, M., Boeche, C., et al. (including **Paul J. McMillan**), 2013, AJ, 146, 134. (Citations to date 237.)
- 38. "Analysing surveys of our Galaxy I. Basic astrometric data", **Paul J. McMillan** & Binney, J., 2012, MNRAS, 419, 2251. (Citations to date 26.)
- 39. "The solar neighbourhood in angle coordinates: the Hyades moving group", **Paul J. McMillan**, 2011, MNRAS, 418, 1565. (Citations to date 22.)
- 40. "The dangers of deprojection of proper motions", **Paul J. McMillan** & Binney, J., 2009, MN-RAS, 400, L103. (Citations to date 11.)
- 41. "The haloes of merger remnants", **Paul J. McMillan**, Athanassoula, E. & Dehnen, W., 2007, MNRAS, 376, 1261. (Citations to date 15.)