

Jerry A Sellwood – Curriculum Vitae

Contact Information

Address: Steward Observatory, University of Arizona,
933 N Cherry Avenue, Tucson, AZ 85721
Telephone: 520 621 9384 (work) 520 347 7922 (home)
e-mail: sellwood@as.arizona.edu

Education and qualifications

1971 B.Sc. Honours in Physics Bristol University, England
1972 Diploma in Education Makerere University, Kampala, Uganda
1977 Ph.D. Astronomy Manchester University, England

Professional career

2017 – Distinguished Campus Colleague, University of Arizona
and Associate of Steward Observatory
1991 – 2017 Associate (to 1998) then Full (to 2013) then Distinguished Professor
Dept. of Physics & Astronomy, Rutgers University, New Jersey
1990 – 1991 Associate Astronomer
Space Telescope Science Institute, Baltimore
1986 – 1990 SERC Advanced Fellow
Dept. of Astronomy, Manchester University, England
1984 – 1986 Research Fellow
Kapteyn Laboratory, University of Groningen, The Netherlands
1980 – 1984 Research Associate
Institute of Astronomy, Cambridge, England
1977 – 1979 NATO then ESO Fellow
Stockholm Observatory, Sweden and ESO, Geneva, Switzerland

Memberships

1984 - present	Full member	American Astronomical Society, Div. Dyn. Astr.
1982 - present	Member	International Astronomical Union
1992 – 2006	Founder member	European Astronomical Society
1982 – 2006	Fellow	Royal Astronomical Society

Research interests

Dark matter, galactic structure, galaxy formation, stellar dynamics, accretion discs, star formation, N -body simulations, computational astrophysics. See <http://www.physics.rutgers.edu/~sellwood> for more information.

Honors

February 2020: Elected “Legacy Fellow” of American Astronomical Society
April 2013: Rutgers Board of Trustees Award for Excellence in Research
May 2012: Winner of the Brouwer Award of the American Astronomical Society
April 1999: Graduate Teaching Award from Rutgers University Graduate School

Service

van Biesbroeck Prize Award Committee (Mar 2012 - Feb 2015)

Division of Dynamical Astronomy (of the AAS) Committee (July 2011 - June 2014)

Brouwer Award Selection Committee (Sept. 2006 – Sept. 2009, Chair 08/09)

AURA: University member representative (from July 99). Served on the Membership Committee and the Advisory Committee on International Affiliates.

Member of *ad hoc* review panel for ST-DADS (1991)

Grant Review Panels or consultant for NSF, NASA, NRC, Canadian NSERC, British SERC/PPARC, Italian Ministry for University Research, International Science Foundation, Israel Science Foundation, Netherlands Organisation for Science Research (NWO), Research Foundation of Flanders (FWO Belgium), & Universiteit Gent Onderzoeksraad (Research Council). Time allocation committees for Hubble Space Telescope, Canada-France-Hawaii Telescope Time Allocation Committee, & British Panel for the Allocation of Telescope Time.

Publications in the past 5 years

Sellwood, J. A. “Spiral instabilities: Little interaction with a live halo” *MNRAS*, accepted, July 1, 2021 (arXiv:2107.00599)

Sellwood, J. A., Spekkens, K. & Eckel, C. S. 2021, “Uncertainties in Galaxy Rotation Curves” *MNRAS*, **502**, pp3843–3854 (arXiv:2101.02525)

Sellwood, J. A. & Carlberg, R. G. 2021, “Spiral instabilities: Linear and non-linear effects” *MNRAS*, **500**, pp5043–5055 (arXiv:2011.03041)

Sellwood, J. A. & Gerhard, O. E. 2020, “Three Mechanisms for Bar Thickening” *MNRAS*, **495**, pp3175–3191 (arXiv:2005.05184)

Sellwood, J. A. 2020, “Spiral instabilities in N -body Simulations: Emergence from noise II” *MNRAS*, **492**, pp3103–3106 (arXiv:2001.00855)

Sellwood, J. A. & Carlberg, R. 2019, “Spiral instabilities: Mechanism for recurrence” *MNRAS*, **489**, pp116–131 (arXiv:1906.04191)

Sellwood, J. A., Shen, J. & Li, Z. 2019, “The global stability of M33: still a puzzle” *MNRAS*, **486**, pp4710–4723 (arXiv:1902.07222)

Sellwood, J. A., Trick, W., Carlberg, R., Coronado, J. & Rix, H-W. 2019, “Discriminating among theories of spiral structure using Gaia DR2”, *MNRAS*, **484**, pp3154–3167 (arXiv:1810.03325)

Mitchell, C. J., Sellwood, J. A., Williams, T. B., Spekkens, K., Kuzio de Naray, R., & Bixel, A. 2018, “The RINGS Survey III: Medium-resolution $H\alpha$ Fabry-Pérot Kinematic Data Set”, *AJ*, **155**, 123 (28 pages) (arXiv:1801.07750)

Li, Z., Sellwood, J. A. & Shen, J. 2017, “Rapid Formation of Black Holes in Galaxies: a Self-limiting Growth Mechanism” *ApJ*, **850**, 67 (11 pages) (arXiv:1710.04683)

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