



Curriculum Vitae of Brenda Louise Frye

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 933 N Cherry Ave, Tucson, AZ 85716
- Experience
- 2025 - present: **Professor of Astronomy, University of Arizona**
 Department ranked **#4 worldwide** in Space Sciences (US News & World Report 2025)
 - 2020 - 2025: Associate Professor of Astronomy, University of Arizona
 - 2012 - 2020: Assistant Professor of Astronomy, University of Arizona
 - 2009 - 2011: Tenure-track Assistant Professor of Physics, **University of San Francisco**
 - 2005 - 2009: Lecturer of Physics, **Dublin City University**, Dublin, Ireland
- Education
- 2001 - 2005: Council of Science & Technology Postdoctoral Fellow, **Princeton University** (1 of 3 awards in U. S. in all science disciplines)
 - 2001- 2004: NSF Astronomy & Astrophysics Postdoctoral Fellow (1 of 15 awards in U. S.)
 - 1999 - 2001: **Lawrence Berkeley National Laboratory**
 Research Scientist, Supernova Cosmology Project
- Postdoc Advisor: Prof. Saul Perlmutter (**Nobel Laureate in Physics, 2011**)
- 1999: Ph.D. Astrophysics, University of California at Berkeley
 - 1995: M.S. Astrophysics, University of California at Berkeley
 - 1991: B.S. Physics & Astronomy, University of Arizona *Magna cum Laude*
- Awards
1. Invited Lecturer of Astrophysics, Lake Como Institute of Advanced Study, School of Physics, 2025
 2. Lead, international “PEARLS-Clusters” branch of James Webb Space Telescope (JWST) Guaranteed Time Observations PEARLS program (PI: R. Windhorst) 2013 - 2025
 3. Co-Chair, College of Science Faculty Council, UArizona 2025-26
 4. Director/Deputy Director of Undergraduate Majors in Astronomy, UArizona 2022-present
 (375 students in one of the largest Astronomy programs in the U.S.)
 5. PI, Special Session of national American Astronomical Society (AAS) Meeting 2026
 6. Affiliate Scientist, Lawrence Berkeley National Laboratory (LBNL) (2025-26)

7. PI, Parallel Session of international Texas Symposium on Relativistic Astrophysics(including 5 Nobel Laureates) 2025
8. Discovery of “SN H0pe” called third most surprising result of JWST in first 3 years by NASA,out of 860 scientific programs: (<https://science.nasa.gov/missions/webb/3-years-of-science-10-cosmic-surprises-from-nasas-webb-telescope/>) 2025
9. Invited Colloquia in Astronomy & Astrophysics at Harvard University, Princeton University, Stanford University, Johns Hopkins University, Arizona State University, University of California at San Diego, and Embry Riddle Aeronautical University 2025
10. Guest Lecturer, Vatican Observatory Eclipse Retreat, Bloomington, Illinois 2025
11. PI, JWST Guest Observer Program (Cycle 3, PID 4744); ≈8 % acceptance rate tallied in 2024.
12. Invited Colloquia in Astronomy & Astrophysics at University of Oregon at Eugene, University of Alabama at Huntsville, and Lawrence Berkeley National Laboratory 2024
13. Scientific Administrative Consultant, NASA 2022-24
14. PI, JWST Cycle 1 program (DD-4446): Disruptive Directors Discretionary Time,
15. Visiting Professor, Department of Physics, University of California, Berkeley (2016, 2017, 2021-24)
16. Invited Colloquia in Astronomy & Astrophysics at Brookhaven National Laboratory 2023
17. Keynote Speaker, UArizona College of Science Honors Convocation, 2023
18. Invited Speaker, international Japan Society for the Promotion of Science, National Astronomical Observatory in Japan 2023
19. Deputy Lead, American Physical Society (APS) Conference for Women in Physics (CUWiP) 2019-23
20. **Sabbatical Member**, School of Natural Sciences, **Institute for Advanced Study**, Princeton, NJ 2020 - 2021
21. Filmed for Nova documentary on “Mathematics from Zero to Infinity” 2021
22. Invited Speaker, Bridges Lecture Series, St. Jerome’s University, Waterloo, Canada 2020
23. Visiting Professor, *Institut d’Astrophysique Spatiale Universite’ Paris-Sud*, Orsay, France (2015, 2019)
24. Dublin Institute for Advanced Study (DIAS) Research Associate, Ireland (2009-2019)
25. JWST Near Infrared Camera (NIRCam) Science & Instrument Teams, U. S. (2012-2017)
26. Lucas/San Diego Astronomy Junior Faculty Award (1 award annually) 2016
27. Visiting Professor, Institute of Astronomy, Cambridge University, England 2015
28. Visiting Member, School of Natural Sciences, Institute for Advanced Study Princeton, NJ 2015
29. Visiting Professor of Physics, State University of New York (SUNY) Stony Brook 2011
30. JWST NIRCam Science & Instrument Teams, U. S.; cryo tester, Lockheed Martin (2012)
31. JWST MIRI Science & Instrument Teams, European Consortium; cryo tester,Rutherford Appleton Laboratory 2010
32. Harvard Center for Astrophysics Postdoctoral Fellowship, 4-year *declined* 2001-5

33. NSF Graduate Student Research Fellowship 1991-94
34. The Outstanding Senior, Department of Astronomy, and The Outstanding Senior, College of Science, University of Arizona 1991

Publications > 300, citations >10,000, H index >50, over 70 invited presentations.

Professional Service & Recognition

- Vatican Observatory Science Advisory Board Member (SAB) 2025 - present
- Consultant, Dutch Research Council 2022
- NASA high-level scientific administrator (2022-24)
- NSF Astronomy and Astrophysics Grant Panelist, (2019)
- NSF Astronomy & Astrophysics Postdoctoral Fellowship (AAPF) Panelist (2015, 2019, 2024)
- Referee, manuscripts: The Astrophysical Journal, Astronomy & Astrophysics, Monthly Notices of the Royal Astronomical Society
- NASA - Hubble Space Telescope Telescope Allocation Committee Reviewer 2012-2021
- National Optical Astronomical Observatories (NOAO) Telescope Allocation Committee Lead of Observing Panelists 2017
- NASA - JWST Telescope Allocation Committee Reviewer 2025
- NASA - Euclid Space Observatory Allocation Committee Reviewer 2024
- NASA - Galax Mission Telescope Allocation Committee Reviewer 2007

Supervision • 6 postdocs supervised/funded in projects resulting in peer-reviewed works

- >15 graduate students supervised/funded (formal advising to projects to full Ph. D. theses)
- >30 undergraduate students supervised, from summer projects to peer-reviewed works

Synergistic Activities (selected)

- **Teaching and Training.** Coursework: >20 years delivering full courses in Physics & Astronomy at all levels, across Europe and the U.S., reaching >1000 students; supervised >50 students and postdocs at all levels in independent research projects spanning three universities and two continents; *Curriculum Development:* Introduced active learning strategies into teaching courses from the non-major to Ph.D., level; Introduced new course on Introductory Astrophysics at UArizona, with emphasis on Honors student participation; reformatted astronomy lecture courses away from traditional (more passive) lecture setting.
- **Communications.** *Presentations:* Delivered >25 seminars in person since 2023 in U.S. and international destinations, such as Tokyo, Barcelona, New York, Los Angeles, and Como (Italy); *Media:* appeared in 24 periodicals and/or television/news stories since 2021, such as “The Wall Street Journal”, National Public Radio (NPR), “New Scientist”, “Quanta” magazine, and “Sciences Avenir”.
- **Leadership.** *University, National and International Committees:* Vatican Observatory Science Advisory Board member (2025-present); UArizona College of Science (COS) Associate Dean of Research Selection Committee (2026); **Co-Lead, COS Faculty Council**

(2025-present); Member of College of Science (COS) Faculty Council (2024-25); **Director/Trailing Director of Undergraduate Studies for Astronomy**; Member, COS Outstanding Senior Selection Committee (2023-25); PI, American Astronomical Society (AAS) #247 Winter Meeting Special Session, “Extragalactic Time Domain Science with JWST” (January 2026); Scientific Organizing Committee (SOC) of the international Texas Astrophysics Symposium & Organizer of Parallel Session on “High-Redshift Transients with JWST” (December 2025); Consultant, Dutch Research Council 2022; > 10 years scientific panelist for selection of space-based telescope programs (HST, JWST, Euclid, Galax); Dublin Institute for Advanced Studies Research Associate (2009-2019).

- **Outreach.** Weekly writer on extragalactic astronomy for Vatican Observatory Foundation’s newsletter, with worldwide distribution reaching >350,000 viewers (2015-2020); speaker at annual Vatican Observatory Faith and Science Workshops (2015-2026); regular speaker for professional, public and school-aged audiences (ongoing);