

Savannah Gramze, M.Sc.

✉ savannahgramze@ufl.edu 🌳 SpacialTree

🌐 <https://spacialtree.github.io/>

Education

- 2023 – now 📖 **Ph.D., University of Florida** Astronomy.
Thesis: *Galactic Center Structure and Dynamics*. Advisor: Adam Ginsburg
- 2021 – 2023 📖 **M.Sc. Astronomy, University of Florida**.
Thesis: *Evidence of a Cloud-Cloud Collision from Overshooting Gas in the Galactic Center*.
- 2017 – 2021 📖 **B.Sc. Astronomy, University of Arizona** cum laude.
Thesis: *Colliding Clouds in the Milky Way's Central Bar*.

Employment

- 2022 – now 📖 **Research Assistant**. Astronomy Department, College of Liberal Arts and Sciences, University of Florida.
- 2021 – 2022 📖 **Teaching Assistant**. Astronomy Department, College of Liberal Arts and Sciences, University of Florida.

Awards and Achievements (Total: \$20,045)

- 2025 📖 **Graduate Student Travel Award** \$800, University of Florida.
- 2022 📖 **Graduate Student Teaching Award** \$500, University of Florida.
- 2020 📖 **Galileo Circle Scholar** \$1,000, University of Arizona.
- 📖 **NSF Research Experiences for Undergraduates** \$7,645, National Radio Astronomical Observatory, virtual.
- 2019 📖 **NASA Space Grant** \$2000, University of Arizona.
- 📖 **NSF Research Experiences for Undergraduates** \$8,100, National Radio Astronomical Observatory, Socorro, New Mexico.
- 2017-2021 📖 **Dean's List**, University of Arizona.

Research Publications

- 6 Natalie Butterfield, Larry Morgan, Ashley Barnes, Adam Ginsburg, **Savannah Gramze**, Mark Morris, Mattia Sormani, Cara Battersby, Charlie Burton, Allison Costa, Elisabeth Mills, Juergen Ott, and Michael Rugel. "Discovery of a Giant Molecular Cloud at the Midpoint of the Galactic Bar Dust Lanes: M4.7-0.8". In: *arXiv e-prints*, arXiv:2503.14174 (Mar. 2025), arXiv:2503.14174. 🌐 DOI: 10.48550/arXiv.2503.14174. arXiv: 2503.14174 [astro-ph.GA].
- 5 Adam Ginsburg, John Bally, Ashley T. Barnes, Cara Battersby, Nazar Budaiev, Natalie O. Butterfield, Paola Caselli, Laura Colzi, Katarzyna M. Dutkowska, Pablo García, **Savannah Gramze**, Jonathan D. Henshaw, Yue Hu, Desmond Jeff, Izaskun Jiménez-Serra, Jens Kauffmann, Ralf S. Klessen, Emily M. Levesque, Steven N. Longmore, Xing Lu, Elisabeth A. C. Mills, Mark R. Morris, Francisco Nogueras-Lara, Tomoharu Oka, Jaime E. Pineda, Thushara G. S. Pillai, Victor M. Rivilla, Álvaro Sánchez-Monge, Miriam G. Santa-Maria, Howard A. Smith, Yoshiaki Sofue, Mattia C. Sormani, Grant R. Tremblay, Gijs Vermariën, Alexey Vikhlinin, Serena Viti, Dan Walker, Q. Daniel Wang, Fengwei Xu, and Qizhou Zhang. "A Broad Line-width, Compact, Millimeter-bright Molecular Emission Line Source near the Galactic Center". In: 968.1, L11 (June 2024), p. L11. 🌐 DOI: 10.3847/2041-8213/ad47fa. arXiv: 2404.07808 [astro-ph.GA].

- 4 Andy Nilipour, Juergen Ott, David S. Meier, Brian Svoboda, Mattia C. Sormani, Adam Ginsburg, **Savannah R. Gramze**, Natalie O. Butterfield, and Ralf S. Klessen. “Turbulent Pressure Heats Gas and Suppresses Star Formation in Galactic Bar Molecular Clouds”. In: 977.1, 37 (Dec. 2024), p. 37. [DOI](#): 10.3847/1538-4357/ad8631. arXiv: 2410.09258 [astro-ph.GA].
- 3 Kelly N. Sanderson, Anna D. Kapińska, Moire K. M. Prescott, Audrey F. Dijeu, **Savannah R. Gramze**, Jacqueline Hernandez, and Katherine T. Kauma. “Signatures of Active Galactic Nucleus Feedback Modes: A Green Bean Galaxy with 150 kpc Jet-induced Radio Emission”. In: 971.1, 20 (Aug. 2024), p. 20. [DOI](#): 10.3847/1538-4357/ad50a8. arXiv: 2405.19558 [astro-ph.GA].
- 2 Adam Ginsburg, Ashley T. Barnes, Cara D. Battersby, Alyssa Bulatek, **Savannah Gramze**, Jonathan D. Henshaw, Desmond Jeff, Xing Lu, E. A. C. Mills, and Daniel L. Walker. “JWST Reveals Widespread CO Ice and Gas Absorption in the Galactic Center Cloud Go.253+0.016”. In: 959.1, 36 (Dec. 2023), p. 36. [DOI](#): 10.3847/1538-4357/acfc34. arXiv: 2308.16050 [astro-ph.GA].
- 1 **Savannah R. Gramze**, Adam Ginsburg, David S. Meier, Juergen Ott, Yancy Shirley, Mattia C. Sormani, and Brian E. Svoboda. “Evidence of a Cloud–Cloud Collision from Overshooting Gas in the Galactic Center”. In: 959.2, 93 (Dec. 2023), p. 93. [DOI](#): 10.3847/1538-4357/ad01be. arXiv: 2309.16403 [astro-ph.GA].
- 0 Mihailo M. Martinović, Kristopher G. Klein, **Savannah R. Gramze**, Himanshu Jain, Milan Maksimović, Arnaud Zaslavsky, Chadi Salem, Ioannis Zouganelis, and Zoran Simić. “Solar Wind Electron Parameters Determination on Wind Spacecraft Using Quasi-Thermal Noise Spectroscopy”. In: *Journal of Geophysical Research (Space Physics)* 125.8, e28113 (Aug. 2020), e28113. [DOI](#): 10.1029/2020JA028113.

Skills

Coding	<ul style="list-style-type: none"> Python, Git, High Performance Computing, bash, UNIX, Java, \LaTeX, ... Creating and publishing python packages (e.g. astropixel), Debugging code, software testing, code documentation, parallel programming, Writing jupyter notebook tutorials
Imaging	<ul style="list-style-type: none"> Python, CASA
Packages	<ul style="list-style-type: none"> matplotlib, numpy, astropy, jwst-pipeline, astroquery, regions, spectral-cube, reproject, specutils, photutils, despotic, dust_extinction, radio_beam sklearn
Programs	<ul style="list-style-type: none"> VSCode, Anaconda, Google Suite, Obsidian, Microsoft Office 360, Slack
Web Dev	<ul style="list-style-type: none"> HTML, css
Misc.	<ul style="list-style-type: none"> Academic research, teaching, \LaTeX typesetting and publishing.

Presentations

August 2024	ACES Workshop in Boston, Massachusetts
June 2024	ACES Workshop in Garching, Germany
November 2023	JWST Data Products Workshop in Baltimore, Maryland at the Space Telescope Science Institute
April 2023	Galactic Center Workshop in Granada, Spain
June 2022	From Stars to Galaxies II in Gothenburg, Sweden
January 2021	237th AAS Meeting Poster virtual
August 2020	NRAO Student Talk virtual
January 2020	235th AAS Meeting Poster in Honolulu, Hawaii

Presentations (continued)

August 2019 **NRAO Student Talk** in Socorro, New Mexico at the Array Operations Center

Teaching Experience

2021 – 2022 **Instructor.** AST 1022L Astronomy Laboratory, College of Liberal Arts and Sciences, University of Florida.

Training

July 2024 **Code/Astro Workshop** in Evanston, Illinois
November 2023 **2nd IAA-CSIC Severo Ochoa Advanced School on Star Formation**
in Granada, Spain

Service

NASA Executive Secretary

References

Available on Request