# Anna Wright

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#### Education

Рн.D. in Physics & Astronomy, Rutgers, the State University of New Jersey 2020

Thesis: "Discerning the Difficult-to-Detect: Star Formation in Dwarf and Low Surface

Brightness Galaxies."

Advisor: Alyson Brooks

M.S. in Physics & Astronomy, Rutgers, the State University of New Jersey 2019

B.S. in Astrophysics, Rice University 2014

## Awards, Fellowships, & Grants

2019	Robert A. Schommer Prize
2018	American Astronomical Society International Travel Grant
2016-2020	Association for Computing Machinery Special Interest Group on High Performance Com-
	puting/Intel Computational & Data Science Fellowship
2015	Noemie Koller Endowed Scholarship
2015	National Science Foundation Graduate Fellowship Honorable Mention
2014-2015	Graduate Assistance in Areas of National Need Fellowship
2014	Alexander J. & Lorraine H. Dessler Award in Space Physics
2013	Rice University Department of Physics & Astronomy Summer Research Fellowship

Rice Space Institute Award 2013

2020

Rice University Trustee Distinguished Scholarship 2010-2014

#### Seminars & Conference Presentations

"The Formation of Isolated Ultra-Diffuse Galaxies in ROMULUS25," Center for Astrophysics 2021 Galaxies & Cosmology and Stars & Planets Seminar.

"The Formation of Isolated Ultra-Diffuse Galaxies in ROMULUS25," N-Body Shop Excellence 2021 Conference 2021.

"The Formation of Ultra-Diffuse Galaxies in the Field," Johns Hopkins University Center for 2020 Astrophysical Sciences Wine & Cheese Seminar.

"The Formation of Isolated Ultra-Diffuse Galaxies in Romulus25," Galaxy Formation & Evolution in the Era of the Nancy Grace Roman Space Telescope.

"The Formation of Isolated Ultra-Diffuse Galaxies in ROMULUS25," Princeton Galread Sem-2020 inar.

- "The Formation and Evolution of Low Surface Brightness Galaxies in Romulus," 235<sup>th</sup> Meeting of the American Astronomical Society.
- "Denizens of the Low Surface Brightness Universe," *Vanderbilt University*.
- "Isolated Ultra Diffuse Galaxies in the (Simulated) Wild," Space Telescope Science Institute.
- "Denizens of the Low Surface Brightness Universe," *The Ohio State University Center for Cosmology and AstroParticle Physics (CCAPP) Seminar.*
- "Isolated Ultra-Diffuse Galaxies in the (Simulated) Wild," Yale University.
- "Isolated Ultra-Diffuse Galaxies in the (Simulated) Wild," Small Galaxies, Cosmic Questions.
- "Discerning the Difficult to Detect: the Dim, the Diffuse, and the Dwarfs," *Max Planck Institute for Astrophysics Cosmology Seminar*.
- <sup>2018</sup> "Reignition of Star Formation in Dwarf Galaxies," 15<sup>th</sup> Annual Potsdam Thinkshop.
- "Galaxies Less Travelled: Star Formation in Low Mass and Low Surface Brightness Galaxies," *New York Area Computational Astrophysics Meeting*.

### **Publications**

- Carleton, T., Guo, Y., Munshi, F., Tremmel, M., & Wright, A., "An Excess of Globular Clusters in UDGs Formed Through Tidal Heating", in press.
- Wright, A. C., Tremmel, M., Brooks, A. M., Munshi, F., Nagai, D., Sharma, R. S., & Quinn, T. R., "The Formation of Isolated Ultra-Diffuse Galaxies in ROMULUS25.", in press.
- Tremmel, M., **Wright, A. C.**, Brooks, A. M., Munshi, F., Nagai, D., & Quinn, T. R. "The Formation of Ultra-Diffuse Galaxies in the ROMULUSC Galaxy Cluster Simulation", *MN-RAS*, 497(3):2786.
- Sharma, R., Brooks, A., Somerville, R. S., Tremmel, M., Bellovary, J., **Wright, A.**, & Quinn, T. R., "Black Hole Growth and Feedback in Isolated ROMULUS25 Dwarf Galaxies", *ApJ*, 897,
- Wright, A. C., Brooks, A. M., Weisz, D. R., & Christensen, C. R., Reignition of Star Formation in Dwarf Galaxies", MNRAS, 482(1):1176.
- Hansen, E., Hartigan, P., Adams, A., **Wright, A.**, & Raymond, J. C., "Simulating Radiative Magnetohydrodynamical Flows with ASTROBEAR: Implementation and Applications of Non-Equilibrium Cooling", MNRAS, 481(3):3098.
- Hartigan, P. & Wright, A., "A New Diagnostic of Magnetic Field Strengths in Radiatively Cooled Shocks", *ApJ*, 811, 12.

### Education, Leadership, & Outreach Experience

- 2019-2020 Mentor in Rutgers University Department of Physics & Astronomy Near-Peer Mentor Program
- 2019,'20 Lab Instructor for PHYS 343: Observational Radio Astronomy
  - **Duties**: Instructing students in and out of lab on computational techniques for data reduction and analysis in radio astronomy.
- Talk: *The Sun, the Moon, and the Stars* for first grade classes at Redshaw School, New Brunswick
- 2017 Member of South African Large Telescope (SALT) Time Allocation Committee

- Talk: Looking Out for the Little Guy: Star Formation in Dwarf Galaxies for Rutgers Friends of Astronomy
- Panelist: What Life is Like in Graduate School for Research Experiences for Undergraduates, Rutgers University
- Member of Rutgers University Physics & Astronomy Graduate Student Life Committee **Duties**: Serving as the point of contact between graduate students and the faculty, meeting with a faculty liaison to discuss issues concerning the department's students, and responding to inquiries from prospective graduate students about the Rutgers program.
- Panelist: Succeeding in High Performance Computing: My Journey for Association for Computing Machinery/Institute of Electrical and Electronics Engineers Supercomputing Conference
- Student member of Rutgers University Graduate Student Recruitment Committee **Duties**: Coordinating prospective students' visits to Rutgers and organizing activities for the prospective student open house.
- Teaching Assistant for PHYS 115/116: Extended Analytical Physics I/II **Duties**: Leading biweekly recitation sections, which included workshops and labs aimed at instilling a conceptual understanding of physics in mathematically underprepared freshmen.
- Treasurer of Rutgers University Physics & Astronomy Graduate Student Organization **Duties**: Composing and submitting budgets for graduate student activities, helping to organize these events, and submitting follow-up reports to the Rutgers University Graduate Student Association.
- Member of Rutgers University Traveling Science Show (coordinator since 2018) **Duties**: Annual visits to Camden Street School in Newark, NJ, where members perform and explain science demonstrations for second grade classes. As coordinator, I also contact the teachers at Camden Street to find out what the current curriculum covers and then collaborate with the Rutgers University Physics Support Specialist to put together appropriate demonstrations.
- Ran Q&A sessions about astronomy and graduate school for high school students
  Volunteer: American Physical Society Conference for Undergraduate Women in Physics

  Duties: Helping to organize events for CUWiP and serving as a judge for the undergraduate poster contest.
- Secretary of Rice University Society of Physics & Astronomy Students. **Duties**: Writing and distributing minutes for meetings and helping to organize information sessions about Research Experiences for Undergraduates programs and graduate school.