Anna Wright

San Martin Dr Bloomberg Center for Physics & Astronomy Johns Hopkins University Baltimore, MD 21210

email: acwright@jhu.edu

Education

2020 Ph.D. in Physics & Astronomy, Rutgers, the State University of New Jersey
Thesis: "Discerning the Difficult-to-Detect: Star Formation in Dwarf and Low Surface

Brightness Galaxies." Advisor: Alyson Brooks

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

B.S. in Astrophysics, Rice University

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
2013	Rice Space Institute Award

2010-2014 Rice University Trustee Distinguished Scholarship

Seminars & Conference Presentations

2020	'The Formation of Ultra-Diffuse Galaxies in the Field." Johns Hopkins University Center for
	Astrophysical Sciences Wine & Cheese Seminar. Baltimore, MD, USA.
2020	"The Formation of Isolated Ultra-Diffuse Galaxies in ROMULUS25." Princeton Galread Sem-
	inar. Princeton, NJ, USA.
2020	"The Formation and Evolution of Low Surface Brightness Galaxies in Romulus." 235 th Meet-
	ing of the American Astronomical Society. Honolulu, HI, USA.
2019	"Denizens of the Low Surface Brightness Universe." Vanderbilt University. Nashville, TN,
	USA.
2019	"Isolated Ultra Diffuse Galaxies in the (Simulated) Wild." Space Telescope Science Institute.
	Baltimore, MD, USA.
2019	"Denizens of the Low Surface Brightness Universe." The Ohio State University Center for

- Cosmology and AstroParticle Physics (CCAPP) Seminar. Columbus, OH, USA.
- "Isolated Ultra Diffuse Galaxies in the (Simulated) Wild." *Yale University.* New Haven, CT, USA.
- "Isolated Ultra Diffuse Galaxies in the (Simulated) Wild." *Small Galaxies, Cosmic Questions.*Durham, England, UK.
- "Discerning the Difficult to Detect: the Dim, the Diffuse, and the Dwarfs." *Max Planck Institute for Astrophysics Cosmology Seminar*. Garching bei München, Bavaria, Germany.
- ²⁰¹⁸ "Reignition of Star Formation in Dwarf Galaxies." *15th Annual Potsdam Thinkshop.* Potsdam, Brandenburg, Germany.
- "Galaxies Less Travelled: Star Formation in Low Mass and Low Surface Brightness Galaxies." New York Area Computational Astrophysics Meeting. New York City, NY, USA.

Education, Leadership, & Outreach Experience

- 2019-2020 Mentor in Rutgers University Department of Physics & Astronomy Near-Peer Mentor Program
- 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
- 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.
- 2015-2020 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.

Publications

- Carleton, T., Guo, Y., Munshi, F., Tremmel, M., & Wright, A., "An Excess of Globular Clusters in UDGs Formed Through Tidal Heating", submitted to MNRAS.
- 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.", submitted to MN-RAS.
- 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, 1.
- 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 Astrobean: 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.