Anna Wright

Assistant Research Scientist Bloomberg Center for Physics & Astronomy Johns Hopkins University email: acwright@jhu.edu

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

Rice University Trustee Distinguished Scholarship 2010-2014

Publications

Olsen, C., Gawiser, E., Iyer, K., McQuinn, K.B.W., Johnson, B.D., Telford, G., Wright, A.C., 2021 Broussard, A., & Kurczynski, P., "Star Formation Histories from SEDs and CMDs Agree: Evidence for Synchronized Star Formation in Local Volume Dwarf Galaxies over the Past 3 Gyr", Ap7, 913(1):45.

Carleton, T., Guo, Y., Munshi, F., Tremmel, M., & Wright, A., "An Excess of Globular 2021 Clusters in UDGs Formed Through Tidal Heating", MNRAS, 502(1):398.

Wright, A. C., Tremmel, M., Brooks, A. M., Munshi, F., Nagai, D., Sharma, R. S., & 2021 Quinn, T. R., "The Formation of Isolated Ultra-Diffuse Galaxies in ROMULUS25.", MNRAS, 502(4):5370.

Tremmel, M., Wright, A. C., Brooks, A. M., Munshi, F., Nagai, D., & Quinn, T. R. "The 2020 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):103.
- 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(1):12.

Seminars & Conference Presentations

- "The Formation of Isolated Ultra-Diffuse Galaxies in Romulus25," Center for Astrophysics Galaxies & Cosmology and Stars & Planets Seminar.
- "The Formation of Isolated Ultra-Diffuse Galaxies in Romulus25," N-Body Shop Excellence Conference 2021.
- "The Formation of Ultra-Diffuse Galaxies in the Field," *Johns Hopkins University Center for 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 Seminar*.
- "The Formation and Evolution of Low Surface Brightness Galaxies in Romulus," 235th 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*.
- ²⁰¹⁸ "Reignition of Star Formation in Dwarf Galaxies," 15th Annual Potsdam Thinkshop.
- "Galaxies Less Travelled: Star Formation in Low Mass and Low Surface Brightness Galaxies," New York Area Computational Astrophysics Meeting.

Education, Leadership, Service, & Outreach Experience

- 2021 Reviewed ACM SIGHPC Computational & Data Science Fellowship applications
- 2021 Co-mentor of postbaccalaureate student in STScI's Space Astronomy Summer Program
- Reviewed STScI's Space Astronomy Summer Program applications
- 2019-2021 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
- 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.