

ANNA C. WRIGHT

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RESEARCH INTERESTS

dwarf galaxies, low surface brightness galaxies, stellar halos, galaxy mergers, cosmological simulations, synthetic data

EDUCATION

Ph.D. in Physics & Astronomy <i>Rutgers, the State University of New Jersey</i>	Piscataway, NJ 2014–2020
M.S. in Physics & Astronomy <i>Rutgers, the State University of New Jersey</i>	Piscataway, NJ 2014–2019
B.S. in Astrophysics <i>Rice University</i>	Houston, TX 2010–2014

EXPERIENCE

Assistant Research Scientist <i>Johns Hopkins University</i>	Baltimore, MD 2020–Present
Graduate Research Assistant <i>Rutgers, the State University of New Jersey</i>	Piscataway, NJ 2014–2020
Undergraduate Research Assistant <i>Rice University</i>	Houston, TX 2012–2014

GRANTS & AWARDS

NASA, <i>PI of Hubble Space Telescope Cycle 31 Program AR-17549</i>	2023–
ACM & Intel, <i>ACM SIGHPC Computational & Data Science Fellowship</i>	2016–2020
Rutgers, <i>Robert A. Schommer Prize</i>	2019
AAS, <i>International Travel Grant</i>	2018
Rutgers, <i>Noemie Koller Endowed Scholarship</i>	2015
NSF, <i>Graduate Research Fellowships Program Honorable Mention</i>	2015
Rutgers, <i>Graduate Assistance in Areas of National Need Fellowship</i>	2014–2015
Rice, <i>Alexander J. & Lorraine H. Dessler Award in Space Physics</i>	2014
Rice, <i>Rice University Trustee Distinguished Scholarship</i>	2010–2014
Rice, <i>Department of Physics & Astronomy Summer Research Fellowship</i>	2013
Rice, <i>Rice Space Institute Prize</i>	2013

ADVISING & MENTORING

Co-mentor, <i>Eugene Lee (STScI Space Astronomy Summer Program Student)</i>	2023
Advisor, <i>Nguyen Binh (STScI Space Astronomy Summer Program Student)</i>	2022
Near-peer mentor, <i>Lana Eid (Rutgers University Graduate Student)</i>	2019–2022
Co-mentor, <i>Nami Nishimura (STScI Space Astronomy Summer Program Student)</i>	2021

SERVICE

Coordinator, <i>JHU Women in Physics Mentorship Program</i>	2022–Present
Senate Member, <i>JHU Women in Physics</i>	2022–Present
Panelist, <i>National Science Foundation</i>	2023
Poster Judge, <i>AAS Chambliss Student Achievement Award</i>	2023

Committee Member, <i>N-Body Shop Code of Conduct Committee</i>	2021–2023
Application Reviewer, <i>ACM SIGHPC Computational & Data Science Fellowship</i>	2021–2023
Application Reviewer, <i>STScI Space Astronomy Summer Program</i>	2021–2023
Journal Reviewer, <i>Nature Astronomy</i>	2021
Panelist, <i>What Life is Like in Graduate School (Rutgers Summer REU Program)</i>	2017
Time Allocation Committee, <i>SALT 2017-1 Rutgers TAC</i>	2017
Committee Member, <i>Rutgers Physics & Astronomy Graduate Student Life Committee</i>	2016–2017
Panelist, <i>Succeeding in HPC: My Journey (Supercomputing 2016)</i>	2016
Student Organizer, <i>Rutgers Physics & Astronomy Graduate Student Recruitment Committee</i>	2016
Treasurer, <i>Rutgers Physics & Astronomy Graduate Student Organization</i>	2015–2016
Student Organizer, <i>APS CUWiP at Rutgers</i>	2015

TEACHING & OUTREACH

Guest Lecturer, <i>The Evolving Universe (Yale)</i>	2022
Co-organizer, <i>Astro Scholars (JHU/STScI)</i>	2022
Speaker, <i>Astro Scholars (JHU/STScI)</i>	2022
Speaker, <i>STScI Space Astronomy Summer Program</i>	2022
Lab Instructor, <i>Observational Radio Astronomy (Rutgers)</i>	2019, 2020
Coordinator, <i>Rutgers Traveling Science Show at Camden Street Elementary School</i>	2018–2019
Presenter, <i>Rutgers Traveling Science Show at Camden Street Elementary School</i>	2015–2019
Guest Speaker, <i>Rutgers Young Scholars Program in Discrete Mathematics</i>	2015, 2016, 2019
Guest Speaker, <i>Redshaw Elementary School</i>	2018
Speaker, <i>Friends of Rutgers Astronomy</i>	2017
Teaching Assistant, <i>Extended Analytical Physics I/II (Rutgers)</i>	2015–2016

TALKS, SEMINARS, & TUTORIALS (†INVITED)

†Seminar, <i>University of Connecticut (scheduled)</i>	2023
†Colloquium, <i>University of Massachusetts (scheduled)</i>	2023
Talk, <i>Galactic Frontiers: Dwarf Galaxies in the Local Volume and Beyond</i>	2023
†Talk, <i>Streams across Simulations/Center for Computational Astrophysics</i>	2023
†Seminar, <i>European Space Agency</i>	2023
†Talk, <i>AAS 241: Nearby Galaxies under a New Light with Roman</i>	2023
†Seminar, <i>American Museum of Natural History</i>	2022
†Colloquium, <i>George Mason University</i>	2022
Seminar, <i>STScI/JHU HotSci Talk Series</i>	2022
Talk, <i>N-Body Shop Workshop/Center for Computational Astrophysics</i>	2022
Tutorial (powderday), <i>N-Body Shop Workshop/Center for Computational Astrophysics</i>	2022
†Seminar, <i>University of California, Riverside</i>	2022
†Seminar, <i>The Center for Astrophysics Harvard & Smithsonian</i>	2021
Talk, <i>N-Body Shop Excellence Conference</i>	2021
Seminar, <i>Johns Hopkins University</i>	2020
Talk, <i>Galaxy Formation & Evolution in the Era of the Nancy Grace Roman Space Telescope</i>	2020
†Seminar, <i>Princeton University</i>	2020
Talk, <i>235th Meeting of the American Astronomical Society</i>	2020
†Seminar, <i>Vanderbilt University</i>	2019
†Seminar, <i>STScI</i>	2019
†Seminar, <i>The Ohio State University CCAPP</i>	2019
†Seminar, <i>Yale University</i>	2019
Talk, <i>Small Galaxies, Cosmic Questions</i>	2019

†Seminar, <i>Max Planck Institute for Astrophysics</i>	2018
Talk, <i>15th Annual Potsdam Thinkshop</i>	2018
Talk, <i>New York Area Computational Astrophysics Meeting</i>	2017

OPEN-SOURCE PROJECTS CONTRIBUTED TO

tangos	2022-Present
yt	2021-Present
Enzo	2020-Present
Powderday	2020-Present

PUBLICATIONS

View my papers on [ADS](#)

PRIMARY REFEREED PUBLICATIONS

6. *Figuring Out Gas & Galaxies in Enzo (FOGGIE) VII: The (Dis)Assembly of Stellar Halos*
Wright, A. C., Tumlinson, J., Peebles, M. S., O'Shea, B. W., Lochhaas, C., Corlies, L., Smith, B. D., Binh, N., Augustin, R., & Simons, R. C., 2023, submitted to *ApJ*
5. *What's in a Name? Quantifying the Interplay between Definition, Orientation and Shape of UDGs using the ROMULUS Simulations*
Van Nest, J. D., Munshi, F., **Wright, A. C.**, Tremmel, M., Brooks, A. M., Nagai, D. & Quinn, T., 2022, *ApJ*, 926(1):92.
4. *The Formation of Isolated Ultra-Diffuse Galaxies in ROMULUS25*
Wright, A. C., Tremmel, M., Brooks, A. M., Munshi, F., Nagai, D., Sharma, R. S., & Quinn, T. R., 2021, *MNRAS*, 502(4):5370.
3. *The Formation of Ultra-Diffuse Galaxies in the ROMULUSC Galaxy Cluster Simulation*
Tremmel, M., **Wright, A. C.**, Brooks, A. M., Munshi, F., Nagai, D., & Quinn, T. R., 2020, *MNRAS*, 497(3):2786.
2. *Reignition of Star Formation in Dwarf Galaxies*
Wright, A. C., Brooks, A. M., Weisz, D. R., & Christensen, C. R., 2019, *MNRAS*, 482(1):1176.
1. *A New Diagnostic of Magnetic Field Strengths in Radiatively Cooled Shocks*
Hartigan, P. & **Wright, A.**, 2015, *ApJ*, 811(1):12.

OTHER REFEREED PUBLICATIONS

5. *Figuring Out Gas & Galaxies in Enzo (FOGGIE) VI: CGM Supported in Emergent, Non-Hydrostatic Equilibrium*
Lochhaas, C., Tumlinson, J., Peebles, M. S., O'Shea, B. W., Werk, J. K., Simons, R. C., Juno, J., Kopenhafer, C. E., Augustin, R., **Wright, A. C.**, Acharyya, A., & Smith, B. D., 2022, *ApJ*, 948(1):43
4. *Star Formation Histories from SEDs and CMDs Agree: Evidence for Synchronized Star Formation in Local Volume Dwarf Galaxies over the Past 3 Gyr*
Olsen, C., Gawiser, E., Iyer, K., McQuinn, K. B. W., Johnson, B. D., Telford, G., **Wright, A. C.**, Broussard, A., & Kurczynski, P., 2021, *ApJ*, 913(1):45.

3. *An Excess of Globular Clusters in UDGs Formed Through Tidal Heating*
Carleton, T., Guo, Y., Munshi, F., Tremmel, M., & **Wright, A.**, 2021, *MNRAS*, 502(1):398.
2. *Black Hole Growth and Feedback in Isolated ROMULUS25 Dwarf Galaxies*
Sharma, R., Brooks, A., Somerville, R. S., Tremmel, M., Bellovary, J., **Wright, A.**, & Quinn, T. R., 2020, *ApJ*, 897(1):103.
1. *Simulating Radiative Magnetohydrodynamical Flows with ASTROBEAR: Implementation and Applications of Non-Equilibrium Cooling*
Hansen, E., Hartigan, P., Adams, A., **Wright, A.**, & Raymond, J. C., 2018, *MNRAS*, 481(3):3098.

UNREFEREED PUBLICATIONS

2. *Snowmass2021 Cosmic Frontier White Paper: Cosmological Simulations for Dark Matter Physics*
Banerjee, A., Boddy, K. K., Cyr-Racine, F., Erickcek, A. L., Gilman, D., Gluscevic, V., Kim, S., Lehmann, B. V., Mao, Y., Mocz, P., Munshi, F., Nadler, E. O., Necib, L., Parikh, A., Peter, A. H. G., Sales, L., Vogelsberger, M., & **Wright, A. C.**, 2022, *Snowmass2021 Cosmic Frontier White Paper*
1. *Ultra-Diffuse Galaxies on the Run*
Wright, A. C., 2021, *Nature Astronomy News & Views*, 5:1208.