

Daniel R. Piacitelli

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EDUCATION

Ph.D. Candidate – Physics: Astrophysics

2022 - Current

Rutgers University – Piscataway, NJ

B.S. Astronomy & Physics – Minor Applied Mathematics

2018 - 2022

University of Washington – Seattle, WA

SUBMITTED PUBLICATIONS (citation count on left)

— FIRST AUTHOR —

2 | **Piacitelli, D. R.**, Brooks, A., Christensen, C., Sanchez, N., Faerman, Y., Shen, S., Cruz, A., Keller, B., Quinn, T., & Wadsley, J. (2025). “*Marvelous Metals: Surveying the Circumgalactic Medium of Simulated Dwarf Galaxies.*” (Submitted to ApJ)

7 | **Piacitelli, D. R.** & Solhaug, E., Faerman, Y., & McQuinn, M. (2022). “*Absorption-based circumgalactic medium line emission estimates.*” MNRAS, 516(2), 3049-3067.

— CONTRIBUTING AUTHOR —

9 | Faerman, Y., **Piacitelli, D. R.**, McQuinn, M., & Werk, J. (2025). “*The Signatures of Density Fluctuations and Mixing Gas in Circumgalactic Absorption Systems.*” ApJ, 983(2), 176.

28 | Butsky, I., Werk, J., Tchernyshyov, K., Fielding, D., Breneman, J., **Piacitelli, D. R.**, Quinn, T., Sanchez, N., Cruz, A., Hummels, C., Burchett, J., & Tremmel, M. (2022). “*The Impact of Cosmic Rays on the Kinematics of the Circumgalactic Medium.*” ApJ, 935(2), 69.

— NON-ACADEMIC —

Levesque, E.; Ivie, R., Johns-Krull, C., Krahm, G., Lopez, L., MacGregor, M., Monzon, S., **Piacitelli, D. R.**, Redfield, S., Rice, T., (2025). “*AAS Graduate Admissions Task Force: Final report and recommendations*”

TALKS

Conference Poster, *Galactic Frontiers II* – Dartmouth College, Hanover, NH – **June 2025**

Invited Seminar, *Galaxies Lunch* – Yale University, New Haven, CT – **February 2025**

Seminar, *Galaxy Formation Seminar* – Center for Computational Astrophysics, New York, NY – **January 2025**

Conference Talk, *Multiphase Madness Conference* – Center for Astrophysics, Cambridge, MA – **August 2024**

Conference Poster, *Small Galaxies Cosmic Questions II* – Durham University, Durham, UK – **July 2024**

Seminar, *Galaxy Formation Seminar* – Center for Computational Astrophysics, New York, NY – **May 2024**

Symposium Talk, *Mary Gates Undergraduate Research Symposium* – University of Washington, Seattle, WA – **May 2021**

Symposium Talk, *Mary Gates Undergraduate Research Symposium* – University of Washington, Seattle, WA – **May 2019**

HONORS & AWARDS

Baer Prize, *University of Washington*

05/2021

Astronomy Departmental Honors, *University of Washington*

2019 - 2022

Dean’s List Status, *University of Washington*

2018 - 2022

MENTORSHIP

— STUDENTS ADVISED —

Hetvi Khatri, *Undergraduate Research*

2025 - Current

Rutgers University

— PROGRAMS —

- Honors College Grads Giving Back** 2023 - 2025
Rutgers University – Piscataway, NJ
 - Mentoring honors college undergraduates on crafting graduate school applications personal statement, engaging in research endeavors, honing research presentation skills, and more
- Department of Physics Near-Peer Mentor** 2023 - Current
Rutgers University – Piscataway, NJ
 - Supporting and guiding an incoming graduate student up to their qualifying exam
- Astronomy Undergraduate Peer Mentoring** 2021 - 2022
University of Washington – Seattle, WA
 - Supporting and guiding fellow undergraduates through academic and professional challenges in biweekly collaborative meetings

TEACHING

- Intro to Research and Research Communities in Physics & Astronomy** Fall 2024, Fall 2025
Rutgers University – Piscataway, NJ
- Teaching Assistant** 2022 - Current
Rutgers University – Piscataway, NJ
 - Courses:
 - **PHYS229: Analytical Physics III Laboratory** (Spring Semester 2024)
 - **PHYS229: Analytical Physics II Laboratory** (Fall Semester 2023)
 - **PHYS206: General Physics Laboratory** (Spring Semester 2023)
 - **PHYS203: General Physics Recitation** (Fall Semester 2022)
- Grader for Upper-Level Astronomy Courses** 2020 - 2022
University of Washington – Seattle, WA
 - Courses:
 - **ASTR 322: The Contents Of Our Galaxy** (Fall Quarters 2020 & 2021)
 - **ASTR 323: Extragalactic Astronomy And Cosmology** (Winter Quarters 2021 & 2022)
 - **ASTR 321: The Solar System** (Spring Quarters 2021 & 2022)
 - **ASTR 480: Introduction to Astronomical Data Analysis** (Spring Quarter 2022)

LEADERSHIP, INVOLVEMENT, & OUTREACH

- Working Group on Graduate Admissions** 2024 - Current
American Astronomical Society
 - Serves as an immediate community resource dedicated to collecting and communicating current information regarding graduate admissions trends and complications.
- AAS Graduate Admissions Task Force Member** 2024 - 2025
American Astronomical Society
 - Address inclusivity issues regarding the Ph.D. application process by collecting data from multiple institutions and drafting official recommendations
- Astro Grad Student Congress Representative** 2023 - Current
 - Aims to bring together astronomy graduate students from across the United States to promote interdepartmental discourse.
- New Brunswick Health Sciences Technology High School Outreach** 2023 - 2024
Rutgers University – Piscataway, NJ
 - Independently organizing a review experience for undergraduates to receive feedback from graduate students, post-docs, and faculty on their applications to REUs and Ph.D. programs
 - Hosting panels and presentations to classes on applying to REUs and Ph.D. programs
- Asynchronous Student Peer Instruction & Review Experience (ASPIRE)** 2023 - Current
Rutgers University – Piscataway, NJ

- Independently organizing a review experience for undergraduates to receive feedback from graduate students, post-docs, and faculty on their applications to REUs and Ph.D. programs
- Hosting panels and presentations to classes on applying to REUs and Ph.D. programs

Minorities in Physics and Astronomy - Vice President 2024 - 2025

Minorities in Physics and Astronomy - Treasurer 2023 - 2024

Minorities in Physics and Astronomy - Member 2022 - 2023

Rutgers University – Piscataway, NJ

- Advancing the concerns of, and nurturing a sense of community among, individuals who self-identify as part of historically underrepresented and marginalized communities
- Writing and managing the budget and initiating reimbursements

Physical Sciences Curriculum Team Lead, Synbio For Everyone 2021 - 2022

University of Washington – Seattle, WA

- Organizing and managing the physical sciences curriculum team in creating activities to that teach physical sciences topics and aim to improve accessibility of K-12 STEM education materials
- Working alongside students with disabilities to complete our activities and assess their efficacy in the classroom

Undergraduate Research Leader 2020 - 2022

University of Washington – Seattle, WA

- Motivating fellow undergraduates to engage in research through panel discussions and presenting my research projects and research experiences to undergraduate classes
- Reviewing Mary Gates Undergraduate Research Symposium abstracts for scientific clarity