

ISABELLA L. TRIERWEILER

219 Prospect Street, New Haven, CT 06511

isabella.trierweiler@yale.edu

EMPLOYMENT

Postdoctoral Associate , Yale University	<i>2024 - Present</i>
Graduate Student Researcher , University of California, Los Angeles <i>Advisor: Edward Young</i>	<i>2018 - 2024</i>
REU Student Researcher , Harvard & Smithsonian Center for Astrophysics <i>Advisor: Yuanyuan Su</i>	<i>2016</i>

EDUCATION

University of California, Los Angeles Ph.D. Astronomy & Astrophysics M.S. Astronomy & Astrophysics	<i>2018 - 2024</i>
Yale University B.S. Astrophysics	<i>2014 - 2018</i>

HONORS AND AWARDS

NASA Future Investigators in Earth & Space Science & Technology (FINESST)	<i>2023</i>
Michael A. Jura Memorial Award	<i>2023</i>
NASA ExoExplorers Cohort Member	<i>2023</i>
Outstanding Teaching Award, UCLA	<i>2021</i>
Service in Diversity, Equity, and Inclusion Award, UCLA	<i>2020</i>
George Beckwith Prize for Undergraduate Astronomy Thesis, Yale	<i>2018</i>
Saybrook College Research Fellowship	<i>2017</i>
National Science Foundation REU Fellowship	<i>2016</i>
Yale College Summer Research Grant	<i>2015</i>

PUBLICATIONS

- Trierweiler I.L.**, Melis C., Le Bourdais E., Dufour P., Weinberger A.J., Gansicke B.T., Gentile-Fusillo N., Xu S., Farihi J., Swan A., Rice M., Young E. (2025) Do White Dwarfs Sample Water-Rich Planetary Material? ApJ, Submitted
- Trierweiler I.L.**, Doyle A.E., Young E.D (2023) A Chondritic Solar Neighborhood. PSJ, 136(4). 10.3847/PSJ/acdef3
- Doyle A.E., Klein B.L., Dufour P., Melis, et al. (including Trierweiler I. L.) (2023) New chondritic bodies identified in eight oxygen-bearing white dwarfs. ApJ, 950(2). 10.3847/1538-4357/acbd44
- Trierweiler I.L.**, Doyle A.E., Melis C., Walsh K.J. and Young E.D (2022) Exomoons as Sources of White Dwarf Pollution. ApJ, 936(1). 10.3847/1538-4357/ac86d5

5. **Trierweiler I.L.**, and Schlichting H.E. (2022) Atmosphere Loss by Aerial Bursts. MNRAS, 513(3), 3650-3659. 10.1093/mnras/stac1509
6. Sarkar A., Su Y., Randall S., Gastaldello F., **Trierweiler I.L.**, et al. (2021) Joint Suzaku and Chandra observations of the MKW4 galaxy group out to the virial radius. MNRAS, 501(3), 3767-3780. 10.1093/mnras/staa3858
7. Edwards L.O.V., Salinas M., Stanley S., et al. (including Trierweiler, I. L.) (2021) Clocking the formation of today's largest galaxies: wide field integral spectroscopy of brightest cluster galaxies and their surroundings. MNRAS, 491(2), 2617-2638. 10.1093/mnras/stz2706
8. Edwards L.O.V., Alpert H.S, **Trierweiler I.L.**, Abraham T., Beizer V.G. (2016) Stellar populations of BCGs, close companions and intracluster light in Abell 85, Abell 2457 and IIZw108. MNRAS 461(1), 230-239. 10.1093/mnras/stw1314

PRESENTATIONS

ExoNYC Meeting (talk)	<i>February 2025</i>
Ohio State University Exoplanet group	<i>January 2025</i>
Yale University Exoplanet Seminar	<i>October 2024</i>
AAS Meeting #243 (Dissertation talk)	<i>January 2024</i>
ExSoCal Conference (talk)	<i>December 2023</i>
University of Michigan SPF (talk)	<i>December 2023</i>
NASA ExoExplorers (talk)	<i>June 2023</i>
Aspen Winter Conference (talk)	<i>March 2023</i>
LPSC #54, The Woodlands, TX (poster)	<i>March 2023</i>
AAS Meeting #240, Pasadena, CA (talk)	<i>June 2022</i>
AAS DPS #53 (virtual talk)	<i>October 2021</i>
Mount Diablo Astronomical Society (public talk)	<i>November 2020</i>
UCLA Planetarium (public talk)	<i>October 2019</i>
AAS Meeting #231, National Harbor, MD (poster)	<i>January 2018</i>
Research Symposium, University of Pennsylvania (plenary)	<i>November 2017</i>
AAS Meeting #231, Grapevine, TX (poster)	<i>January 2017</i>

TEACHING EXPERIENCE

Guest Lecturer , Yale University	<i>2025</i>
<ul style="list-style-type: none"> · Research Methods in Astrophysics · Exoplanets 	
Teaching Assistant , University of California, Los Angeles	<i>2018 - 2024</i>
<ul style="list-style-type: none"> · Stellar Evolution, Galaxies, and Cosmology · Gravity and Black Holes · Introductory Physics Lab (Mechanics) 	

- Introductory Astronomy: Life in the Universe
- Introductory Astronomy: Nature of the Universe, Lead TA

Lead Instructor, Yale Young Global Scholars *2019*

- Designed seminar series for high school students on topics in astronomy and science communication
- Mentored 25 students in cryptocurrency capstone projects

Physics Coach, Yale ONEXYS *2017 - 2018*

- Hosted weekly tutoring sessions to prepare incoming students for college-level math and physics courses

OUTREACH AND LEADERSHIP

NASA ExoExplorers Alumni Mentoring Program Coordinator *2025 - Present*

Author for Astrobites, an astronomy blog *2022 - 2023*

- Wrote accessible summaries of astronomy journal articles aimed at students and the public
- Provided press coverage at major conferences
- **Chair of Diversity, Equity, and Inclusion Committee**; Interviewed and promoted work by scientists of diverse backgrounds

Volunteer for Letters to a Pre-Scientist *2022 - 2023*

Organizer and Instructor for UCLA's Summer Observing Workshop *2019-2023*

- Designed course in astronomy and coding for high school students, including hands-on observing at Lick Observatory
- Mentored 12 students through introductory research projects

DEI Student Advisory Board, UCLA Division of Physical Sciences *2021 - 2022*

Outreach Coordinator for Astronomy Live!, University of California, Los Angeles *2020 - 2022*

- Organized science demonstrations at elementary and middle schools around Los Angeles
- Created additional online programming using Universe Sandbox to serve schools during the pandemic

Chair of Marginalized Identities in Physics and Astronomy, UCLA *2020 - 2022*

- Facilitated grad/undergrad mentoring program
- Organized fee waivers and conference funding for members and incoming students

Organizer for Astronomy on Tap, West LA chapter *2020 - 2022*

Student Mentor, UCLA Women in Physics *2019 - 2021*

Volunteer for Exploring Your Universe, UCLA's public science fair *2018 - 2019*

Academic Strategies Mentor, Yale University *2017 - 2018*

- Provided group and 1-1 academic counseling to students
- Hosted workshops and developed wiki of STEM resources through Center for Teaching and Learning

Women in Physics Board Member, Yale University

2017 - 2018

Co-President of Yale Undergraduate Aerospace Association

2016 - 2017

PROFESSIONAL ACTIVITIES

Referee for MNRAS, APJ

Yale Exoplanets and Stars Seminar Organizer

2025

NASA Astrophysics Mission Design School

2025

Proposal Manager

UCLA Astronomy and Astrophysics Graduate Admissions Committee Member

2024

NASA Review Panel Executive Secretary

2023

UCO/Lick Observatory Observational Astronomy Workshop

2019