ISABELLA L. TRIERWEILER

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APPOINTMENTS

Postdoctoral Associate, Yale University *2024 - Present*

Graduate Student Researcher, University of California, Los Angeles *2018 - 2024*
Advisor: Edward Young

REU Student Researcher, Harvard & Smithsonian Center for Astrophysics *2016*
Advisor: Yuanyuan Su

EDUCATION

University of California, Los Angeles *2018 - 2024*
Ph.D. Astronomy & Astrophysics (September 2024)
M.S. Astronomy & Astrophysics (June 2020)

Yale University *2014 - 2018*
B.S. Astrophysics (May 2018)

PUBLICATIONS

First Author:

5. **Trierweiler I.L.**, Gerbig, K., Rice, M. (2025) Constraining the Occurrence of ZLK-Induced White Dwarf Pollution with Dissipative Precession. ApJ, 997(2). 10.3847/1538-4357/ae274e
4. **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, 993(1). 10.48550/arXiv.2508.20172
3. **Trierweiler I.L.**, Doyle A.E., Young E.D (2023) A Chondritic Solar Neighborhood. PSJ, 136(4). 10.3847/PSJ/acdef3
2. **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
1. **Trierweiler I.L.**, and Schlichting H.E. (2022) Atmosphere Loss by Aerial Bursts. MNRAS, 513(3), 3650-3659. 10.1093/mnras/stac1509

Co-Author:

5. Bellinger, E., Rice, M., **Trierweiler, I. L.**, Wagg, T., Levine, G., Stegmann, J. Flash-heated worlds: Evolution of Earth–Sun analogs with a massive binary star companion. Submitted, ApJ.
4. 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
3. 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

2. 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
1. 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

HONORS AND AWARDS

NSF AAPF	*2026*
NASA Future Investigators in Earth & Space Science & Technology (FINESST)	*2023*
Michael A. Jura Memorial Award	*2023*
NASA ExoExplorers Cohort Member	*2023*
Outstanding Teaching Award, UCLA	*2021*
Service in Diversity, Equity, and Inclusion Award, UCLA	*2020*
George Beckwith Prize for Undergraduate Astronomy Thesis, Yale	*2018*
Saybrook College Research Fellowship	*2017*
National Science Foundation REU Fellowship	*2016*
Yale College Summer Research Grant	*2015*

PRESENTATIONS

Dartmouth Astronomy Seminar	*June 2026*
Oklahoma University Astronomy Seminar	*May 2026*
Yale Joint Astronomy/Earth and Planetary Science Seminar	*April 2026*
ExoNYC Meeting (talk)	*February 2025*
Ohio State University Exoplanet group	*January 2025*
Yale University Exoplanet Seminar	*October 2024*
AAS Meeting #243 (Dissertation talk)	*January 2024*
ExSoCal Conference (talk)	*December 2023*
University of Michigan SPF (talk)	*December 2023*
NASA ExoExplorers (talk)	*June 2023*
Aspen Winter Conference (talk)	*March 2023*
LPSC #54, The Woodlands, TX (poster)	*March 2023*
AAS Meeting #240, Pasadena, CA (talk)	*June 2022*
AAS DPS #53 (virtual talk)	*October 2021*
Mount Diablo Astronomical Society (public talk)	*November 2020*
UCLA Planetarium (public talk)	*October 2019*
AAS Meeting #231, National Harbor, MD (poster)	*January 2018*
Research Symposium, University of Pennsylvania (plenary)	*November 2017*
AAS Meeting #231, Grapevine, TX (poster)	*January 2017*

TEACHING EXPERIENCE

Guest Lecturer, Yale University *2025 – 2026*
- Research Methods in Astrophysics
- Exoplanets
- Expanding Ideas of Time and Space

Teaching Assistant, University of California, Los Angeles *2018 – 2024*
- Stellar Evolution, Galaxies, and Cosmology
- Gavity and Black Holes
- Introductory Physics Lab (Mechanics)
- Introductory Astronomy: Life in the Universe
- Introductory Astronomy: Nature of the Universe, Lead TA

Tutor, Physics for Life Sciences Majors *2020 – 2021*
- Private tutor for Mechanics, Thermodynamics, and EM

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

Academic Strategies Mentor, Yale University *2017 – 2018*
- Provided group and 1-1 academic counseling to students
- Hosted workshops and developed website of STEM resources for the Center for Teaching and Learning

OUTREACH AND LEADERSHIP

NASA ExoExplorers Alumni Mentoring Program Coordinator *2025 – Present*
- Co-hosted inaugural alumni mentoring program

Undergraduate Mentor, Yale "Astrosibs" mentoring program *2024 – 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
- Selected articles: `https://astrobites.org/author/itrierweiler/`

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!, UCLA *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*

Women in Physics Board Member, Yale University *2017 – 2018*

Co-President of Yale Undergraduate Aerospace Association *2016 – 2017*

PROFESSIONAL ACTIVITIES

Yale Astronomy Colloquium Coordinator	*2025*
Yale Exoplanets and Stars Seminar Coordinator	*2025*
Scientific Mentor - Parker Ellison (undergraduate)	*2025*
NASA Astrophysics Mission Design School (Proposal Manager)	*2025*
UCLA Astronomy and Astrophysics Graduate Admissions Committee Member	*2024*
NASA Review Panel Executive Secretary	*2023*
UCO/Lick Observatory Observational Astronomy Workshop	*2019*
Referee for MNRAS, APJ	

TELESCOPE PROPOSALS AND OBSERVING EXPERIENCE

KPF, Keck Observatory (7 nights)	*2024 - 2025*
EXPRES Instrument, Lowell Discovery Telescope (3 nights)	*2024 - 2025*
Hubble Space Telescope Cycle 32 (67 orbits)	*2024*
HIRES, Keck Observatory (1 night)	*2024*
Chandra X-Ray Observatory Cycle 19 (45 ks)	*2017*