

Olivia Rae Cooper

NSF FELLOW & ASTRONOMY PHD CANDIDATE

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Summary

Research Interests: Massive galaxy evolution at high redshift ($z > 2$); baryonic characterization via multi-wavelength spectroscopic and photometric observations; incorporating climate change education in (astro)physics curricula

Grants & Awards: **\$300k** from NASA, NRAO, Heising-Simons Foundation, NSF

Publications: **4 first-author** (45 citations) with 1 in prep.; 27 co-author (642 citations)

Mentorship: **9 students:** 1 post-bac (1 paper in prep.), 7 undergrad (1 published work), 1 high school

Observing: PI programs on ALMA, Keck, HET, Gemini, Palomar (~**70 hr total**); 27 nights observing on Keck

Talks & Outreach: 20 talks (**9 invited**); 24 science communication articles; 5 public outreach talks/interviews

Leadership: Astrobites Climate Change Committee co-founder, chOIR co-founder, COSMOS-Web Outreach co-chair

Education

The University of Texas at Austin

2020 - 2025 (expected)

PH.D. IN ASTRONOMY

- Advisor: Prof. Caitlin Casey
- NSF Graduate Research Fellow
- Dissertation: *Bright and Early: The Role of Massive Galaxies in the Evolution of the $z > 2$ Universe*

Smith College

2016 - 2020

B.A. IN ASTRONOMY (HIGHEST HONORS) & IN PHYSICS

- Advisor: Prof. James Lowenthal
- Concentration in Climate Change
- Senior Honors Thesis: *Tales From Our Dusty, Warped Past: Lensing Environments of Planck-Selected Submillimeter Galaxies Observed With Gemini*

Professional Appointments

- 2024 **Visiting Researcher**, Cosmic Dawn Center, Neils Bohr Institute
- 2022-25 **NSF Graduate Research Fellow**, UT Austin Astronomy Department
- 2021-22 **Graduate Research Assistant**, UT Austin Astronomy Department
- 2020-21 **Dean's Excellence Fellow**, UT Austin Astronomy Department
- 2019 **LIGO Summer Undergraduate Research Fellow**, Caltech LIGO Lab
- 2018 **Physics & Astronomy NSF REU Fellow**, University of Utah Physics & Astronomy Department
- 2018-20 **Undergraduate Special Studies Researcher**, Smith College Astronomy Department
- 2017-19 **Undergraduate Research Intern**, Merenlender Lab, UC Berkeley
- 2016-18 **STRIDE Scholar**, Smith College Astronomy Department

Awards, Fellowships, & Honors

- 2024 **ALMA Ambassador**, North American ALMA Science Center (NAASC)
Advanced Teaching Preparation Certificate, UT Austin Graduate School
- 2023 **Professional Development Award (x2)**, UT Austin Graduate School
- 2022 **Frank N. Edmonds, Jr. Memorial Fellowship**, UT Austin Astronomy Dept
Board of Visitors 2nd Year Defense Award, UT Austin Astronomy Dept
OGS Summer Fellowship, UT Austin Graduate School
NSF Graduate Research Fellowship, National Science Foundation

- 2020 **Dean's Excellence Fellowship**, UT Austin College of Natural Sciences
Mary Dailey Irvine Prize, (for best astronomy thesis), Five College Astronomy Department
Excellence in Astronomy & Astrophysics, Smith College Astronomy Dept
Florence Augusta Merriam Bailey Prize, (environmental problem solving), Smith College
- 2019 **Goldwater Scholarship**, Barry M. Goldwater Foundation
Chambliss Student Award Honorable Mention, 233rd AAS Meeting
- 2018 **Grand Prize**, (selected for NSF REU Conference), University of Utah REU Symposium
Dean's List, Smith College
- 2017 **Dean's List**, Smith College

Publications

Statistics (as of 13 Dec 2024, source: ADS)

[Link to ADS](#)

number of co-authored accepted (submitted) refereed papers: 21 (6)

number of first-authored accepted (submitted) refereed papers: 3 (1)

h-index: 14

†Denotes papers led by students under my supervision

REFEREED PUBLICATIONS

24. McKinney, J., Casey, C. M., Long, A. S., **Cooper, O. R.**, and 35 other authors. *SCUBADive I: JWST+ALMA Analysis of 289 sub-millimeter galaxies in COSMOS-Web*. ApJ accepted, [arXiv:2408.08346](#)
23. Casey, C. M., Akins, H. B., Kokorev, V., McKinney, J., **Cooper, O. R.**, Long, A. S., Franco, M., and Manning, S. M. *Dust in Little Red Dots*. 2024 ApJL 975, 4, [arXiv:2407.05094](#)
22. Gozaliasl, G., and 17 other authors including **Cooper, O. R.** *COSMOS Brightest Group Galaxies – III: Evolution of stellar ages*. 2024 A&A 690, 315, [arXiv:2408.02577](#)
21. Liu, D., and 84 other authors including **Cooper, O. R.** *Detailed study of a rare hyperluminous rotating disk in an Einstein ring 10 billion years ago*. 2024 Nature Astronomy 8, 118, [nature.com/articles/s41550-024-02296-7](#)
20. Gentile, F., and 37 other authors including **Cooper, O. R.** *Not-so-little Red Dots: Two massive and dusty starbursts at $z \sim 5-7$ pushing the limits of star formation discovered by JWST in the COSMOS-Web survey*. 2024 ApJL 973, 2, [arXiv:2408.10305](#)
19. Franco, Maximilien, Akins, Hollis B., and 48 other authors including **Cooper, O. R.** *Unveiling the distant Universe: Characterizing $z \geq 9$ Galaxies in the first epoch of COSMOS-Web*. 2024 ApJ 973, 23, [arXiv:2308.00751](#)
18. Long, A. S., Antwi-Danso, J., and 31 other authors including **Cooper, O. R.** *Efficient NIRC2 Selection of Quiescent Galaxies at $3 < z < 6$ in CEERS*. 2024 ApJ 970, 68, [arXiv:2305.04662](#)
17. **Cooper, O. R.**, Casey, Caitlin M., and 34 other authors *The Web Epoch of Reionization Lyman- α Survey (WERLS) I. MOSFIRE Spectroscopy of $z \sim 7-8$ Lyman- α Emitters*. 2024 ApJ 970, 50, [arXiv:2309.06656](#)
16. Jung, I., Finkelstein, S. L., and 30 other authors including **Cooper, O. R.** *CEERS: Diversity of Lyman-Alpha Emitters during the Epoch of Reionization*. 2024 ApJ 967, 73, [arXiv:2304.05385](#)
15. Casey, Caitlin M., Akins, Hollis B., and 40 other authors including **Cooper, O. R.** *COSMOS-Web: Intrinsically Luminous $z \gtrsim 10$ Galaxy Candidates Test Early Stellar Mass Assembly*. 2024 ApJ 965, 98, [arXiv:2308.10932](#)
14. Stawinski, S. M., Urbano, Cooper, M. C., Finkelstein, S. L., Jung, I., Pérez-González, P. G., Casey, C. M., **Cooper, O. R.**, Hathi, N. P., Holwerda, B. W., Koekemoer, A. M., Fernández, V., Larson, R. L., Lucas, R. A., Yung, L. Y. A. *Deeper than DEEP: A Spectroscopic Survey of $z > 3$ Lyman- α Emitters in the Extended Groth Strip*. 2024 MNRAS 528, 4, [arXiv:2307.04782](#)
13. Lambrides, E., Chiaberge, M., and 43 other authors including **Cooper, O. R.** *Uncovering a Massive $z \sim 7.65$ Galaxy Hosting a Heavily Obscured Radio-Loud QSO Candidate in COSMOS-Web*. 2024 ApJL 961, 25, [arXiv:2308.12823](#)
12. Kamienieski, P. S., Yun, M. S., Harrington, K. C., Lowenthal, J. D., Wang, Q. D., Frye, B. L., Jimenez-Andrade, E. F., Vishwas, A., **Cooper, O.**, Pascale, M., Foo, N., Berman, D., Englert, A., Garcia Diaz, C. *PASSAGES: the wide-ranging, extreme intrinsic properties of Planck-selected, lensed dusty star-forming galaxies*. 2024 ApJ 961, 2, [arXiv:2301.09746](#)
11. McKinney, J., Manning, S. M., **Cooper, O. R.**, and 32 other authors. *A Near-Infrared Faint, Far-Infrared-Luminous Dusty Galaxy at $z \sim 5$ in COSMOS-Web*. 2023 ApJ 956, 72, [arXiv:2304.07316](#)
10. Akins, H. B., Casey, C. M., and 57 other authors including **Cooper, O. R.** *Two massive, compact, and dust-obscured candidate $z \sim 8$ galaxies discovered by JWST*. 2023 ApJL 956, 61, [arXiv:2304.12347](#)

9. Fujimoto, S., Finkelstein, S. L., and 50 other authors including **Cooper, O. R.** *ALMA FIR View of Ultra High-redshift Galaxy Candidates at $z \sim 11$ -17: Blue Monsters or Low- z Red Interlopers?*. 2023 ApJ 955, 130, [arXiv:2211.03896](#)
8. Casey, C. M., Kartaltepe, J. S., and 83 other authors including **Cooper, O. R.** *COSMOS-Web: An Overview of the JWST Cosmic Origins Survey*. 2023 ApJ 954, 31, [arXiv:2211.07865](#)
7. Long, A. S., Casey, C. M., Lagos, C. P., Lambrides, E. L., Zavala, J. A., Champagne, J., **Cooper, O. R.**, Cooray, A. R. *Missing Giants: Predictions on Dust-Obscured Galaxy Stellar Mass Assembly Throughout Cosmic Time*. 2023 ApJ 953, 11, [arXiv:2211.02072](#)
6. Champagne, J. B., Casey, C. M., Finkelstein, S. L., Bagley, M., **Cooper, O. R.**, Larson, R. L., Long, A. S., Wang, F. *A Mixture of LBG Overdensities in the Fields of Three $6 < z < 7$ Quasars: Implications for the Robustness of Photometric Selection*. 2023 ApJ 952, 99, [arXiv:2304.10437](#)
5. McKinney, J., Finnerty, L., Casey, C. M., Franco, M., Long, A. S., Fujimoto, S., Zavala, J. A., **Cooper, O. R.**, Akins, H., Pope, A., Armus, L., Soifer, B. T., Larson, K., Matthews, K., Melbourne, J., Cushing, M. *Broad Emission Lines in Optical Spectra of Hot, Dust-obscured Galaxies Can Contribute Significantly to JWST/NIRCam Photometry*. 2023 ApJ 946, 39, [arXiv:2301.00017](#)
4. **Cooper, O. R.**, Casey, C. M., Zavala, J. A., Champagne, J. B., da Cunha, E., Kartaltepe, J. S., Long, A. S., Spilker, J. S., Staguhn, J. *Searching Far and Long. I. Pilot ALMA 2 mm Follow-up of Bright Dusty Galaxies as a Redshift Filter*. 2022 ApJ 930, 32, [arXiv:2203.14973](#)
3. Katz, M. L., **Cooper, O. R.**, Coughlin, M. W., Burdge, K. B., Breivik, K., Larson, S. L. *GPU-Accelerated Periodic Source Identification in Large-Scale Surveys: Measuring P and \dot{P}* . 2021 MNRAS 503, 2, [arXiv:2006.06866](#)
2. Ashok, A., Zasowski, G., Seth, A., Hasselquist, S., Bergsten, G., **Cooper, O.**, Boardman, N., Bizyaev, D., Goytia, S. M., García-Hernández, D. A., Roman-Lopes, A. *The APOGEE Library of Infrared SSP Templates (A-LIST): High-resolution Simple Stellar Population Spectral Models in the H Band*. 2021 AJ 161, 4, [arXiv:2012.15773](#)
1. **Cooper, O.**, Keeley, A., Merenlender, A. *Curriculum gaps for adult climate literacy*. 2019 Conservation Science and Practice, e102, <https://doi.org/10.1111/csp2.102>

PUBLICATIONS IN REVIEW

- House, L., **Cooper, O. R.**, Finkelstein, K., and Finkelstein, S. L. *Impact of Climate Change Intervention within Introductory Astronomy Courses*. Submitted to PhysRev PER.
- Cooper, O. R.**, Brammer, G., and 25 other authors *RUBIES: JWST/NIRSpec resolves evolutionary phases of dusty star-forming galaxies at $z \sim 2$* . Submitted to ApJ, [arXiv:2410.08387](#)
- de Graaff, A., and 28 other authors including **Cooper, O. R.** *RUBIES: a complete census of the bright and red distant Universe with JWST/NIRSpec*. Submitted to A&A, [arXiv:2409.05948](#)
- Long, A. S., and 44 other authors including **Cooper, O. R.** *The Extended Mapping Obscuration to Reionization with ALMA (Ex-MORA) Survey: 5σ Source Catalog and Redshift Distribution*. Submitted to ApJ, [arXiv:2408.14546](#)
- Akins, H. B., and 40 other authors including **Cooper, O. R.** *COSMOS-Web: The over-abundance and physical nature of "little red dots"—Implications for early galaxy and SMBH assembly*. Submitted to ApJ, [arXiv:2406.10341](#)
- Faisst, A. L., and 50 other authors including **Cooper, O. R.** *COSMOS-Web: The Role of Galaxy Interactions and Disk Instabilities in Producing Starbursts at $z < 4$* . Submitted to ApJ, [arXiv:2405.09619](#)

NON-REFEREED PUBLICATIONS

- †Magee, J., Casey, C. M., **Cooper, O. R.**, Melendez, A., Fong, M., Kartaltepe, J., Long, A. S., Stawinski, S. U., Champagne, J. B., Cooper, M. C., Faisst, A. L., Maraston, C., and The WERLS Collaboration *Rotation Curve Measurement of Dark Matter Content of a $z \sim 0.5$ Galaxy*. 2023 RNAAS 7, 110, [RNAAS](#)

Invited & Contributed Talks

INVITED SCIENCE TALKS

- | | |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 06 Dec
2024 | RUBIES: JWST/NIRSpec resolves evolutionary phases of dusty star-forming galaxies at $z \sim 2$, galread Journal Club, Department of Astrophysical Sciences, Princeton University, Princeton, NJ |
| 04 Oct
2024 | The Emergence and Evolution of Dusty Galaxies with JWST + ALMA , Friday Lunch Seminar, Astrophysical & Planetary Sciences, CU Boulder, Boulder, CO |

- 30 May 2024 **Taking census of bright and early galaxies in the assembling cosmos**, Cake Talk, Cosmic Dawn Center, Niels Bohr Institute, Copenhagen, Denmark
- 15 May 2024 **Getting a big picture of massive galaxies in the assembling cosmos**, Astronomy & Atmospheric Sciences Seminar, DTU Space, Copenhagen, Denmark
- 17 Apr 2024 **Emerging and Evolving Massive Galaxies**, DAWN Summit, Cosmic Dawn Center, Niels Bohr Institute, Copenhagen, Denmark (*invited review*)
- 22 Nov 2022 **First Results from WERLS: Tracing Ionized Bubbles with Keck and JWST**, Extragalactic Seminar, Cornell Astronomy Dept, Ithaca, NY (*virtual*)
- 07 Nov 2022 **First Results from WERLS: Tracing Ionized Bubbles with Keck and JWST**, Lunch Seminar, New Mexico State University Astronomy Dept, Las Cruces, NM
- 15 Feb 2022 **Searching Far and Long: ALMA 2mm Follow-up of Bright Dusty Galaxies as a Redshift Filter**, Student Seminar, Parsec Institute at University of Montreal, Montreal, Canada (*virtual*)
- 20 Jan 2022 **Searching Far and Long: ALMA 2mm Follow-up of Bright Dusty Galaxies as a Redshift Filter**, CosmoFREDDIE Seminar, Institute for Astronomy, University of Hawaii, Honolulu, HI

CONTRIBUTED SCIENCE TALKS & POSTERS (SELECTED)

- 7 Nov 2024 **The Nebular Attenuation Curve for Dusty Star-Forming Galaxies**, CFC-CCA Joint Workshop on Extreme Star Formation, Austin, TX
- 16 Jul 2024 **Dusty RUBIES: Resolving evolutionary phases of dusty galaxies at cosmic noon**, RUBIES Team Meeting, Madison, WI (*virtual*)
- 27 Apr 2024 **Bright and Early: Tracing rapid assembly via census of massive galaxies in the first 2 Gyr**, Extreme galaxies in extreme environments at extremely early epochs, Reykjavik, Iceland
- 28 Mar 2024 **Bright and Early: Tracing rapid assembly via census of massive galaxies in the first 2 Gyr**, Extragalactic Seminar, UT Austin Astronomy Dept, Austin, TX
- 06 Mar 2024 **Searching Far and Long: ALMA 2 mm Follow-up for Efficient Selection of Early Dusty Starbursts**, The Physics and Impact of Astrophysical Dust: from Star Formation through Cosmology, Aspen Center for Physics, Aspen, CO
- 09 Nov 2023 **Searching Far and Long: Bright 2mm-detected galaxies with (and without) JWST counterparts**, Resolving the Extragalactic Universe with ALMA + JWST, Waseda University, Tokyo, Japan
- 12 Jun 2023 **First Results from WERLS: Tracing Ionized Bubbles with Keck and JWST**, First Light, Massachusetts Institute of Technology, Cambridge, MA
- 25 May 2023 **Searching Far and Long: Bright 2mm-detected galaxies with (and without) JWST counterparts**, COSMOS Team Meeting 2023, RIT, Rochester, NY
- 10 May 2023 **First Results from WERLS: Tracing Ionized Bubbles with Keck and JWST**, CEERS Team Meeting 2023, UT Austin, Austin, TX
- 14 Nov 2022 **First Results from WERLS: Tracing Ionized Bubbles with Keck and JWST**, Extragalactic Seminar, UT Austin Astronomy Dept, Austin, TX
- 12 Jul 2022 **Bright and Early: Efficient Identification of Massive Galaxies at $z > 4$** , COSMOS 2022 Meeting, Institut d'Astrophysique de Paris, Paris, France
- 14 Apr 2022 **Taking census of the extreme in the early Universe: Massive galaxy evolution at $z \sim 3 - 6$** , Cosmos Seminar, UT Austin Astronomy Dept, Austin, TX
- 26 Apr 2021 **Dusty needles in a haystack: 2mm survey of DSFGs in SSA22**, Extragalactic Seminar, UT Austin Astronomy Dept, Austin, TX

INVITED PUBLIC & OUTREACH TALKS

- 19 Mar 2024 **A Wide View of the First Two Billion Years**, Astronomy on Tap, Austin, TX
- 25 Feb 2023 **A Wide View of the First Two Billion Years with COSMOS-Web**, UT Austin Astronomy Dept Board of Visitors Meeting, Austin, TX ([watch here](#))

INVITED PROFESSIONAL DEVELOPMENT PRESENTATIONS

- 22 Sept 2023 **NSF Graduate Research Fellowship Guest Speaker**, NSF Graduate Research Fellowship Program Writer's Workshop, UT Austin Graduate School, Austin, TX
- 08 Sept 2023 **NSF Graduate Research Fellowship Panel**, NSF Graduate Research Fellowship Program Workshop, UT Austin Graduate School, Austin, TX
- 24 Jul 2023 **NSF Graduate Research Fellowship Panel**, Astronomy NSF REU Seminar, UT Austin Astronomy Department, Austin, TX

Observing & Grants

AWARDED TIME (PI)

- MOSFIRE, Keck I (2024B) 2 nights
Unfinished business: a spectroscopic census of dusty starbursts bolstered by ALMA+JWST
- MOSFIRE, Keck I (2024A) 1 night
Mapping a Large Ionized Bubble at $z = 7.68$ in COSMOS
- VIRUS, Hobby-Eberly Telescope (2022-3) 10 hr
Extending a complete census of Lyman- α Emitters in the SSA22 Protocluster at $z = 3.1$
- GNRIS, Gemini North (2022A) 3.8 hr
Spectroscopic determination of the relationship between a luminous X-ray AGN and a strongly lensed HyLIRG at $z = 3.55$
- VIRUS, Hobby-Eberly Telescope (2022-2) 7 hr
Extending a complete census of Lyman- α Emitters in the SSA22 Protocluster at $z = 3.1$
- Atacama Large Millimeter/submillimeter Array (Cycle 8) 9 hr
Needle in a haystack: Identifying the highest-redshift candidate DSFGs using 2mm imaging
- GMOS imaging, Gemini South (2021B) 1.25 hr
Comprehensive Lens Characterization for a Hyperluminous DSFG at $z = 2$
- Triple Spec, Palomar Observatory P200 Telescope (Summer 2019) 1 half night
Phase-resolved spectroscopy of ultra-compact binaries as candidate LISA verification sources

AWARDED TIME (CONTRIBUTING CO-I, SELECTED)

- Atacama Large Millimeter/submillimeter Array (Cycle 10) 144 hr
PI: A. Faisst
The COSMOS High- z ALMA-MIRI Population Survey (CHAMPS): A Wide-Area Comprehensive Survey of the Dusty Universe
- MOSFIRE+LRIS, NASA Keck Key Strategic Mission Support (2022A–2023B) 29 nights
PIs: C. Casey & J. Kartaltepe
Web Epoch of Reionization Lyman- α Survey (WERLS)
- NIRCam+MIRI, JWST (Cycle 1) 254 hours
PIs: C. Casey & J. Kartaltepe
COSMOS-Web: The JWST Cosmic Origins Survey

OBSERVING EXPERIENCE

- LRIS, Keck I (remote, 11 nights) 2022A, 2022B, 2023A
- MOSFIRE, Keck I (local/remote, 16 nights) 2022A, 2024A
- WIYN 2.1 m Telescope, Kitt Peak National Observatory (remote) Jul-Aug 2019
- Triple Spec on P200 Telescope, Palomar Observatory (local) Aug 13, 2019
- WIYN 0.9 m Telescope, Kitt Peak National Observatory (local) Jan 14-19, 2019
- 16" Telescope, Smith College McConnell Observatory (local) Fall 2016-Spring 2020

GRANTS

NAASC Conference and Workshop Support, 2024 <i>Conference funding awarded to chOIR Collaboration</i>	\$9,000
Heising-Simons Open Call for Support of Science Events and Gatherings, 2024 <i>Conference funding awarded to chOIR Collaboration</i>	\$70,000
ALMA Ambassador, Cycle 12	\$10,000
Keck Principal Investigator Data Award, 2024B	\$19,100
Keck Principal Investigator Data Award, 2024A	\$14,750
NRAO Student Observing Support Grant, Cycle 8 <i>Advising PI: C. Casey</i>	\$28,143
NSF Graduate Research Fellowship, 2022-25	\$147,000

Mentorship & Teaching

MENTORSHIP

Postbac	Jake Magee , Postbaccalaureate scholar, UT Austin (<i>co-advising with Prof. Casey</i>)	2023-24
Undergrad	Jake Magee , Undergrad, UT Austin (<i>co-advised with Prof. Casey</i>)	2022-23
(research)	Mia Fong , Undergrad, UT Austin (<i>co-advised with Prof. Casey</i>)	2022-23
	Alfonso Melendez , TAURUS Scholar & undergrad, UT Austin (<i>co-advised with Prof. Casey</i>)	2022-23
Undergrad	Elaine Gammon , REU Student & undergrad researcher, UT Austin	2023-24
(career)	Courtney Reed , TAURUS Scholar, UT Austin	2022
	Ian Wolter , TAURUS Scholar, UT Austin	2022
	Marie Barry , TAURUS Scholar, UT Austin	2021
	Jennifer Poppe , Undergrad, UT Austin	2021-present
Pre-college	Ellis Resnick , Hugo Mentorship; Astronomy & Climate Change Communication	2023

TEACHING

Spring 2024	ASTR250L Guest Instructor (UH Hilo) , guest instructor for upper level undergraduate extragalactic lab, invited to teach observational techniques with hands-on experience during Keck observing runs (PI: Cooper & PI: Drakos)
Fall 2021	Writing about Astronomy guest instruction (UMass Amherst) , guest instructor for astronomy course, delivered tutorial titled "How to read science papers: An Astrobites perspective"
Jan 2018 - May 2019	AST 100 & 113 Teaching Assistant (Smith College) , tutor STEM and non-STEM undergraduates in astronomy courses, administer and evaluate constellation identification and telescope operation quizzes

Outreach, Interviews, & Press

CONTINUED OUTREACH

Astrobites Collaboration

2021-present

[ASTROBITES.ORG/AUTHOR/OCOOPER](https://astrobites.org/author/ocooper)

- *Climate Change Committee Co-Chair (2021-2024)*: co-founded committee to establish conversations and engagement at the interface of astronomy and climate advocacy; facilitate series of climate+astro related posts and host our annual Earth Week x Astrobites virtual, global event
- *Author (2021-2023)*: wrote undergraduate-level summaries of astronomy papers for Astrobites website; published 21 articles over two-year regular author rotation

COSMOS-Web Outreach Committee Co-Chair

2022-present

COSMOS.ASTRO.CALTECH.EDU/PAGE/COSMOSWEB

- *Outreach Committee Co-Chair (2022-present)*: founding co-chair of Outreach Committee; facilitate international group of astronomers interested in engaging the public in COSMOS-Web science and building accessibility of our science products for astronomers outside of the collaboration

SCIENCE WRITING (SELECTED)

O. Cooper. “Eyes Up.” Celebrating the Wonder of Science in the Shadow, BAAS.	2024 Mar 01
O. Cooper. “Climate change and space debris, a vicious cycle.” Astrobites.	2023 Jan 20
O. Cooper. “Can you explain these long dark gaps in your cosmological resume?” Astrobites.	2022 May 16
O. Cooper. “A serving of X-rays in a stack of galaxies.” Astrobites.	2022 Mar 22
O. Cooper. “Rethinking the science conference format.” Astrobites.	2022 Jan 10
O. Cooper. “Replacing our constellations with satellites.” Astrobites.	2021 Sep 10
O. Cooper. “Blazing Hot DOGs at the Cosmic BBQ.” Astrobites.	2021 Jul 21
O. Cooper. “Gotta catch ’em all: the first neutron star-black hole merger detection!” Astrobites.	2021 Jun 30
O. Cooper. “Teaching Change: The Importance of Climate Communication.” SPS Observer.	2020 Spring

MEDIA APPEARANCES & INTERVIEWS

Cosmic Radio, KZYX Mendocino County NPR (radio): “Cosmic Radio Interview with Olivia Cooper”	2024 Apr 3
Point of Discovery, UT Austin College of Natural Sciences (podcast): “Right Place, Right Time”	2022 Dec 13
Astronomy on Tap Jena (vodcast): “Did early galaxies go through climate change?”	2022 Nov 8

Service & Leadership

LEADERSHIP ROLES

2024 - now	chOIR Leadership , co-founder and leadership member for the chOIR collaboration, organize workshops and events, facilitate science and community initiatives
2022 - now	COSMOS-Web Outreach Committee Chair , organize and manage outreach, informal publication, social media, education, and citizen science efforts from the COSMOS-Web team
2022 - 2023	Graduate Student Representative , serve as grad student liaison for dept, attend faculty meetings, host town halls, facilitate dept journal club, organize dept social events, serve on DEI & grad admissions committees
2021 - 2024	Astrobites Climate Change Committee Chair , founder and co-chair for climate change committee within Astrobites, post ~1 climate/astro related post per month, host special Earth Week programming annually
2021 - 2022	TAURUS+REU Social Event Coordinator , organize social events for the summer scholars in the NSF REU & TAURUS program and the graduate students, planned average one event per week for 10 weeks each summer

REFEREEING & REVIEWS

Reviewer for AAS Journals	2024
External Reviewer for Canadian Time Allocation Committee	2022