Dr. Rebecca L. Larson

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EDUCATION

UNIVERSITY OF TEXAS AUSTIN

PH.D. IN ASTRONOMY
Galaxies in the Early Universe
2023

M.A. IN ASTRONOMY
Galaxies in the Early Universe
2018 | GPA: 3.8

B.S. IN ASTRONOMY
B.S. IN PHYSICS
Honors in Astronomy
2016 | GPA: 3.2

DEFENSE LANGUAGE INSTITUTE

A.A. IN ARABIC
2006 | GPA: 4.0

LINKS

Website: www.saturnswings.com
Twitter/Blue Sky: @SaturnsWings
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Work Email: rlarson@stsci.edu
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SKILLS

ASTROPHYSICS

Spectral Line Fitting
Photometric Measurements
Multi-Object Spectroscopy
SED Fitting

PROGRAMMING

IDL • Python • Bash • HTML

WRITING

National Grant Fellowships
Telescope Proposals
Peer-Reviewed Research Publications
Science Communication

OBSERVING

17 Nights - Keck/MOSFIRE+LRIS
3 Nights - CTIO/DECam

MENTORING

REU Research Advisor

INTERESTS

Public Outreach
Science Communication
Volunteer Service
DEI Efforts
Veterans Services

WORK EXPERIENCE

SPACE TELESCOPE SCIENCE INSTITUTE | GIACCONI POSTDOC FELLOW

May 2025 - Present | Baltimore, MD

• PI of an observing program to obtain additional key imaging over the JWST legacy CEERS field. • Research mentor for JHU graduate student.

ROCHESTER INSTITUTE OF TECHNOLOGY | POSTDOCTORAL RESEARCH ASSOCIATE

Jun 2023 - May 2025 | Rochester, NY

• PI of an observing program to characterize the earliest galaxies and black holes with JWST spectroscopy.

THE UNIVERSITY OF TEXAS AT AUSTIN | GRADUATE STUDENT + RESEARCH ASSISTANT + TEACHING ASSISTANT

Jun 2016 - May 2023 | Austin, TX

• PI of a multi-year survey searching for distant galaxies with the Keck Observatory. • Discovered a new $z = 7.452$ galaxy with HST grism data. • Improved the data pipeline for the Keck/MOSFIRE spectrograph• Discovered a new galaxy at $z = 8.7$ with implications of an ionized bubble.• Developed a suite of templates to improve model fits to early galaxies with JWST data. • Discovered the most-distant active black hole, CEERS_1019, with JWST/NIRSpec data.

UNDERGRADUATE STUDENT + RESEARCH ASSISTANT + GRADER

Aug 2013 - May 2016 | Austin, TX

• Discovered the first observational evidence of the decay of turbulence in dense molecular clouds.

UNITED STATES AIR FORCE | ARABIC LINGUIST

Oct 2004 - Oct 2010 | Fort Meade, MD

• Translated audio and written sources from Arabic. • Handled classified intelligence information with a top secret clearance.
• Monitored multiple databases. • Managed a team of eight.

PUBLICATION SUMMARY

LEAD AUTHOR: 7 - CITATIONS: 612 | TOTAL PAPERS: 67 - CITATIONS: 5254
Detailed list below — Last Updated 23-Oct-2025 — Link to ADS Library

AWARDS

FELLOWSHIPS + SCHOLARSHIPS

- David Alan Benfield Memorial Fellowship in Astronomy - Department of Astronomy, UT Austin - Summer 2022
- DAWN-IRES Visiting Scholar, DAWN, Copenhagen Summer 2021
- National Science Foundation Graduate Research Fellowship (NSF-GRFP), 2018-2023
- IPAC Visiting Graduate Student Fellowship, Caltech, Feb-Aug 2018
- Dean's Honored Graduate Award, UT Austin, College of Natural Sciences, - May 2016
- Ralph Cutler Green Endowed Scholarship, UT Austin, Department of Astronomy, - May 2015
- Karl G. Henize Endowed Scholarship , UT Austin, Department of Astronomy, - May 2014

FUNDED GRANT PROPOSALS

Principal Investigator

- NASA JWST Cycle 4 GO - $355k, *SPAM: Star-formation from Photometry through the Addition of Medium-bands* , 2025 - 2028
- NASA JWST Cycle 3 GO - $379k, *Deep Spectroscopy of Galaxies at $z = 4 - 14$: Uncovering Drivers of Early Galaxy Formation and Black Hole Growth* , 2024 - 2027
- NASA Keck Observatory/MOSFIRE - $70k, *Islands of Reionization* , 2018-2020
- National Science Foundation Graduate Research Fellowship (NSF-GRFP) - $100k, *Understanding Galaxy Evolution Since the Beginning* , 2019 - 2022

Co-Investigator

- NASA James Webb Space Telescope - Archival Funding, Cycle 1, *Leveraging Early Public JWST Data to Measure Luminosity Functions and Rest-UV Slopes from 6<z<12* , 2021
- NASA Astrophysics Data Analysis Program (NASA-ADAP), *Leveraging Spitzer and HETDEX to Constrain Reionization*, 2019-2022
- MPS Graduate Research Supplement for Veterans (MPS-GRSV), *Spectroscopic Probes of Reionization and Galaxy Evolution in the First Billion Years* , 2018 - 2019
- NASA Astrophysics Data Analysis Program (NASA ADAP), *Reference Ultraviolet Luminosity Functions for the JWST Era* , 2017 - 2020
- MPS Graduate Research Supplement for Veterans (MPS-GRSV), *Spectroscopic Probes of Reionization and Galaxy Evolution in the First Billion Years* , 2017 - 2018

AWARDED TELESCOPE TIME

Principal Investigator

- NASA JWST Cycle 4 GO - 62.8 Hours, *SPAM: Star-formation from Photometry through the Addition of Medium-bands*, 2025
- NASA JWST Cycle 3 GO - 23.29 Hours, *Deep Spectroscopy of Galaxies at $z = 4 - 14$: Uncovering Drivers of Early Galaxy Formation and Black Hole Growth* , 2024
- McDonald Observatory - Hobby Eberly Telescope/LRS2 2019-3 - 9 hours, *Spectroscopically Confirming the Brightest High-Redshift Galaxies in SHELA* , Fall 2019
- NASA Keck Observatory/MOSFIRE 2019B - Two Nights, *Islands of Reionization* , Dec 2019
- NASA Keck Observatory/MOSFIRE 2019A - Two Nights, *Islands of Reionization* , Mar 2019
- NASA Keck Observatory/MOSFIRE 2018B - Two Nights, *Islands of Reionization* , Nov 2018
- NASA Keck Observatory/MOSFIRE 2018A - Two Nights, *Islands of Reionization* , Apr 2018
- McDonald Observatory - Hobby Eberly Telescope/LRS2 2017-2 - 13 hours, *Confirmation of Lya Emission in Galaxies at the End of Reionization* , Fall 2017
- McDonald Observatory - Hobby Eberly Telescope/LRS2 2017-1 - 13 hours, *Confirmation of Lya Emission in Galaxies at the End of Reionization* , Spring 2017

Co-Investigator

- NASA JWST Cycle 4 GO - 246.2 Hours, *Vast Exploration for Nascent, Unexplored Sources (VENUS)* , 2025
- NASA JWST Cycle 4 GO - 62.9 Hours, *Searching for Population III stars around massive interacting galaxies in the reionization epoch* , 2025
- NASA JWST Cycle 4 GO - 60.9 Hours, *Resolving Multi-phase Outflow/Inflow via Gas Dynamics and Chemical Abundance Distribution in a Sub-L* Dwarf Galaxy at z=6.1* , 2025
- NASA Hubble Space Telescope - 642 Orbits, Cycle 32-34, *CLUTCH: The COSMOS Legacy UV-Optical Treasury Campaign with Hubble* 2024
- NASA JWST Cycle 3 GO - 61.83 Hours, *What really are the Physical Properties of Galaxies in the Epoch of Reionization?* , 2024
- NASA JWST Cycle 3 GO - 193.98 Hours, *The CANDELS-Area Prism Epoch of Reionization Survey (CAPERS)* , 2024
- NASA JWST Cycle 3 GO - 400.00 Hours, *POPPIES: The Public Observation Pure Parallel Infrared Emission-Line Survey* , 2024
- NASA JWST Cycle 3 GO - 73.95 Hours, *MEOW: The MIRI Early Obscured-AGN Wide Survey* , 2024
- NASA JWST Cycle 3 AR, *A Census of Optical Diagnostics of Ionizing Sources Across Cosmic Time* , 2024
- NASA JWST Cycle 3 GO - 22.65 Hours, *Mapping Star Cluster Feedback in a Galaxy 500 Myr after the Big Bang* , 2024
- NASA Hubble Space Telescope - AR, Cycle 31 - *The Role of Galaxy Mergers and Interactions in Fueling Star Formation and Black Hole Activity* , 2023

- NASA JWST Cycle 2 GO - 24.5 Hours, *Breaking the $z = 10$ barrier with MIRI: redshift confirmation and detection of rest-frame optical emission lines* , 2023
- NASA JWST Cycle 2 GO - 10.1 Hours, *Unveiling the Most Distant Lensed Arc at $z \sim 10$* , 2023
- NASA JWST Cycle 2 GO - 17.8 Hours, *Physical Properties of a Possible Galaxy Merger at $z = 10.2$* , 2023
- NASA JWST Cycle 1 DDT - 8 Hours, *Spectroscopic follow-up of ultra-high-z candidates in CEERS: Characterizing true z > 12 galaxies and z 4-7 interlopers in preparation for JWST Cycle 2* , 2022
- ALMA Cycle 9 - 20 Hours, *Dust in galaxies at $z = 8 - 11$* , 2022
- NASA JWST Cycle 1 GO - 121.7/96.4 Hours, *The Next Generation Deep Extragalactic Exploratory Public (NGDEEP) Survey: Feedback in Low-Mass Galaxies from Cosmic Dawn to Dusk* , 2021
- NASA JWST Cycle 1 GO - 18.1 Hours, *Spectroscopic Confirmation and Characterization of Bright Galaxies at z 9* , 2021
- NASA JWST Cycle 1 GO - 17.8 Hours, *The JWST-legacy Narrow-band Survey of H-alpha and [OIII] Emitters in the Epoch of Reionization* , 2021
- NASA JWST Cycle 1 GO - 2.6 Hours, *Confirming a Potential Ultra-Massive Galaxy at z=10.57* , 2021
- NASA JWST Cycle 1 GO - 187.2/94.97 Hours, *PRIMER: Public Release IMaging for Extragalactic Research* , 2021
- NASA Keck Observatory/MOSFIRE 2021A - Two Nights, *CEERS proposal to target z>7 Lya ($z \sim$ 4-5 rest-UV) in the EGS field* , Apr 2021
- ALMA Cycle 8 - 17.8 Hours, [O iii] *88 μm and Dust Continuum Observations of Two Remarkably Luminous Galaxies at $z \sim 10$* , 2021
- ALMA Cycle 8 - 2 Hours, *Deep CII 158 μm Spectroscopy of the Brightest, dusty* [O iii] *88 μm emitter at $z = 10.57$* , 2021
- NASA Keck Observatory/MOSFIRE 2020B - Two Nights, *Using Nebular UV Metal Lines to Probe Redshifts and Physical Conditions in Galaxies During Reionization* , Oct/Dec 2020
- NASA Hubble Space Telescope - 52 Orbits, Cycle 28/29, *TREASUREHUNT: Hubble's UV-Visible treasury imaging of the JWST NEP Time-Domain Field* 2020
- NASA Keck Observatory/MOSFIRE 2020A - Two Nights, *Using Nebular UV Metal Lines to Probe Redshifts and Physical Conditions in Galaxies During Reionization* , Feb 2020
- NASA Hubble Space Telescope - 15 Orbits, Cycle 27, *Confirmation of a Large, Robust Sample of z=9-10 Galaxies in the CANDELS Fields* , 2019
- NASA Hubble Space Telescope - 5 Orbits, Cycle 27, *Observations of the JWST/GTO Very Rich Cluster Lens RMJ121218.5+273255.1* , 2019
- ALMA Cycle 7 - [O iii] *88 μm Line Observations of Four Remarkably Luminous Galaxies at $z \sim$ 9-10* , 2019
- ALMA Cycle 7 - *Confirming the Quiescent Nature of Galaxies at $z = 4$* , 2019
- NASA Keck Observatory/NIRES 2019B - Two Nights, *Spectroscopic Characterization of the Brightest Known Galaxy Candidate at $z > 9$* , Jan 2020
- NASA Spitzer Space Telescope - 687hr IRAC, *The Euclid Deep Field South* , 2019
- NASA Hubble Space Telescope - 2 orbits, Cycle 26 - *Photometric Confirmation of the Brightest Known Galaxy Candidate at $z > 9$* , 2019
- McDonald Observatory - Hobby Eberly Telescope/VIRUS 2017-2 - 13 hours, *TESLA: The Texas Euclid Survey for Lyman Alpha* , Fall 2018
- Co-I - JWST Early Release Science (JWST ERS), *The Cosmic Evolution Early Release Science (CEERS) Survey* , Nov 2017

SCIENCE TALKS AND PRESENTATIONS

Invited Talks

- Colloquium Talk on JWST Galaxy Discoveries, Nov 2025, - UMass, Amherst, MA
- 2025 HotSci at JHU/STScI: High-Redshift Galaxies, July 2025, - STScI, Baltimore, MD - Link to Recording
- Colloquium Talk on JWST Galaxy Discoveries, April 2025, - UConn, Mansfield, CT
- Inaugural Tinsley Workshop: JWST View of the First Galaxies and Black Holes, Oct 2024, - Yale, New Haven, CT
- Massive Black Holes in the First Billion Years Conference, May 2024, - Kinsale, Ireland
- Arab Physical Society, Seminar, Mar 2024, - Virtual - Link to Recording
- AGN Seminar, Dec 2023, - NASA Goddard, Greenbelt, MD
- Special Seminar at STScI on JWST, Dec 2023, - STScI, Baltimore, MD
- Colloquium Talk on JWST Galaxy Discoveries, Nov 2023, - PennState, State College, PA
- NASA Science Mission Directorate Monthly Meeting, Sep 2023, - Virtual - NASA HQ, Washintgon DC

- Science with the Habitable Worlds Observatory, July 2023, - STScI, Baltimore, MD - Link to Recording
- Colloquium Talk on JWST Galaxy Discoveries, April 2023, - UIUC, Urbana-Champagne, IL
- Galaxies Seminar Talk, October 2022, - Virtual - University of Kansas
- Galaxies Group Paper Series, April 2022, - Virtual - Max Planck
- Student Veterans of America National Conference, Jan 2022, - Orlando, CA - Presenter
- Princeton Papers Seminar, November 2021, - Virtual - UCLA
- Caltech Tea Talk, October 2021, - Virtual - Caltech
- NASA JPL Astrophysics Seminar, October 2021, - Virtual - JPL
- UCLA Galaxies Seminar, October 2021, - Virtual - UCLA
- DAWN Cake Talk Series, July 2021, - Virtual - DAWN Center, Copenhagen, Denmark
- Early Universe/Reionization Era Conversations at Arizona (EURECA) Seminar, April 2020, - Virtual - Tucson, AZ
- Gemini Observatory Talk Series, Feb 2020, - Hilo, HI
- Conference for Undergrad Women in Physics (CUWiP), Jan 2020, - College Station, TX - Panelist
- Student Veterans of America National Conference, Jan 2020, - Los Angeles, CA - Presenter
- WFIRST/LSST/EUCLID Deep Field Coordination, Aug 2018, Princeton, NJ - Invited Talk

Conference Talks

- American Astronomical Meeting 2026, Jan 2026, Phoenix, AZ
- 2025 Inaugural CFC Conference, May 2025, - UT Austin, Austin, TX - Link to Recording
- First Stars VII Meeting 2024, May 2024, CCA, New York, NY
- American Astronomical Meeting 2024, Jan 2024, New Orleans, LA
- First Light with JWST, June 2023, MIT, Boston, MA
- American Astronomical Meeting 2022, Jun 2022, Pasadena, CA
- The growth of galaxies in the Early Universe - VII, Mar 2022, Sesto val Pusteria, Italy
- Keck Science Meeting 2021, Sep 2021, UCSC - San Diego, CA, - Video Recording
- Summer All Zoom Epoch of Reionization Astronomy Conference (SAZERAC), June 2021, - Online Talk
- Summer All Zoom Epoch of Reionization Astronomy Conference (SAZERAC), July 2020, - Online Talk
- Keck Science Meeting 2019, Sep 2019, UCLA - Los Angeles, CA
- 'Barefoot EoR' Exploring the first billion years of the Universe, Jul 2019, Cairns, Australia
- COSMOS Meeting, Jun 2018, DAWN Institute - Copenhagen, Denmark
- GISS IPAC Talk Series, Jun 2018, Caltech - Pasadena, CA
- CANDELS SED Fitting Meeting, Apr 2018, UC Riverside - Riverside, CA
- Star Formation in the JWST Era, Oct 2017, Texas A&M University - College Station, TX
- Spectral Diagnostics to Explore the Cosmic Dawn with JWST, Aug 2017, Space Telescope Science Institute - Baltimore, MD
- The Snowbird Cosmic Lyman-Alpha Workshop (SnowCLAW), Mar 2017, Salt Lake City, UT

Conference Posters

- First Year of JWST Science, Sep 2023, STScI - Baltimore, MD
- American Astronomical Society Winter Meeting, Jan 2021, Virtual
- Keck Science Meeting 2020, Sep 2020, Virtual
- American Astronomical Society Winter Meeting, Jan 2020, Honolulu, HI
- Frank N. Bash Symposium, Oct 2019, UT Austin - Austin, TX
- IAU Symposium 352 - Uncovering Early Galaxy Evolution in the ALMA and JWST Era, Jun 2019, Viana do Castelo, Portugal
- American Astronomical Society Winter Meeting, Jan 2019, Seattle, WA
- Keck Science Meeting, Sep 2018, Caltech - Pasadena, CA
- American Astronomical Society Winter Meeting, Jan 2018, Washington, D.C.
- Frank N. Bash Symposium, Oct 2017, UT Austin - Austin, TX
- American Astronomical Society Summer Meeting, Jun 2017, Austin, TX
- American Astronomical Society Winter Meeting, Jan 2017, Grapevine, TX
- American Astronomical Society Winter Meeting, Jan 2016, Orlando, FL
- Frank N. Bash Symposium, Oct 2015, UT Austin - Austin, TX
- International Astronomical Union XXIX General Assembly, June 2015, Honolulu, HI - 2 Posters
- Frank N. Bash Symposium, Oct 2013, UT Austin - Austin, TX

SCIENCE COMMUNICATION AND PUBLIC RELATIONS

Press Releases

- NASA - *JWST Detects Most Distant Active Supermassive Black Hole to Date* , Results from Larson+23, Jul 2023 - Link
- NASA - *New 3D Visualization Highlights 5,000 Galaxies Revealed by JWST* , Coordinated Visualization, Jul 2023 - Link
- NASA - *Webb Offers Never-Before-Seen Details of Early Universe* , Author/Visualization Designer, Oct 2022 - Link

Articles

- Sky & Telescope Magazine - JWST Reveals the Early Universe, Co-Author, Oct 2023
- CEERS Team Website - CEERS Epoch 1 Color Images, Author/Designer, Oct 2022 - Link to Webpage
- UT Austin College of Science - The Unexpected Journey of a Veteran Student and Astronomer, Featured Biography, May 2016 - Link to Article

Interviews

- Science Alert - The Earliest Supermassive Black Hole Ever Found Has Been Identified, Interviewed, July 2023 - Link to Article
- UT Austin News - Turning the Page, Featured and Interviewed, July 2023 - Link to Article
- Rochester Local News - RIT researchers discover most distant black hole yet, larger than they thought possible, Recorded Interview, Jul 2023 - Link to TV Episode
- UT Austin News - Honoring Graduating Veterans, Featured and Interviewed, May 2023 - Link to Article
- Big Think - Did the most distant galaxy "candidates" survive JWST's ultimate test?, Consultant, Mar 2023 - Link to Article
- PBS Nova - New Eye on the Universe, Recorded Interviews, Feb 2023 - Link to TV Episode
- Quanta Magazine - Two Weeks In, the JWST Is Reshaping Astronomy, Interviewed, July 2022 - Link to Article

PUBLIC OUTREACH AND EDUCATION

Talks and Presentations

- Finding Genius Podcast Interview; Link , Oct 2023
- Keck Observatory Public Science Talk; Live Virtual Presentation , Jan 2023
- Astronomy on Tap Jena; Live YouTube Presentation , October 2022
- Astronomy on Tap LA; Live YouTube Presentation , April 2021
- Astronomy on Tap Groningen; Live YouTube Presentation , March 2021
- The Earth is Flat on Planet Pluto; Live YouTube Interview , July 2020
- Starts with a Bang #60; Forbes Podcast, Link , July 2020
- Better Satellite Worlds Summer Series; Space & Satellite Professionals International Podcast, Link , June 2020
- Speaker - KLRU: PBS Austin Next Night - Apollo 11 Documentary; Austin, TX, June 2019
- Astronomy on Tap ATX; Austin, TX, Nov 2018 - YouTube Recording
- Astronomy on Tap LA; Pasadena, CA, Jul 2018
- Astronomy on Tap Santa Barbara; Santa Barbara, CA, May 2018 - YouTube Recording
- Austin Astronomical Society General Meeting; Austin, TX, Oct 2017
- Astronomy on Tap ATX; Austin, TX, Apr 2016 - YouTube Recording

Host/Organizer

- Organizer - Astronomy on Tap ATX ; Austin, TX, 2014 - 2023
- Organizer - Drunk Science Show with Sarafina Nance; YouTube , Apr 2020 - 2021
- Host/Organizer - Astronomy on the Couch World-wide live-stream event; YouTube , April 2020
- Host/Presenter/Organizer - Star Party and Concert fundraiser for Jester King Farms; Austin, TX, Feb 2020

Social Media Lead

- Social Media Lead - Cosmic Evolution Early Release Science (CEERS) Team ; Austin, TX, 2022 - Present
- Social Media Lead - Cosmic Spring Collaboration ; Austin, TX, 2022 - Present

Volunteer/Activity Lead

- Volunteer - Rochester Museum and Science Center - Astronomy on Tap Eclipse Edition, Rochester, NY, Apr 2024
- Activity Lead - Austin Camp Contemporary Art Education Fundraiser; Austin, TX, Oct 2019
- Activity Lead - Thinkery 21: It Came from the Future; Austin, TX, Oct 2019
- Volunteer - UT Austin Introduce a Girl to Engineering Day; Austin, TX, Feb 2019
- Volunteer - AstroFest - Week of Astronomy; Pasadena, CA, Jul 2018

- Volunteer - Jet Propulsion Lab (JPL) Open House; Pasadena, CA, Jun 2018
- Volunteer - UT Austin Introduce a Girl to Engineering Day; Austin, TX, Feb 2017

ACADEMIC SERVICE AND EXPERIENCE

Teaching

- Guest Lecturer - Galaxies for Science Majors, 30 students, Spring 2025
- TA - Intro to Astronomy for Non-Science Majors, 200 students, Fall 2018

Student Advising

- Science Advisor for JHU Graduate Student, Ananya Ganapathy, 2025-Present
- Graduate Student Mentor/Instructor/Organizer for DAWN Summer REU, Summer 2021
- REU Science Advisor for UT Austin REU Student, Blakely Aaronson, Summer 2019
- Informal Mentor for UT Austin TAURUS Summer Student, Oscar Chavez-Ortiz, Summer 2019

Observatory Support

- NASA Keck Observatory 2026B Time Allocation Committee, Panel Chair, 2026
- NASA Keck Observatory 2026A Time Allocation Committee, 2025
- Hubble Space Telescope Cycle 32 Time Allocation Committee, 2023
- Gemini Observatory Science and Technology Advisory Committee Member, Fall 2023-Present

Department Service

- College of Natural Sciences Dean's Search Committee Astronomy Department Graduate Student Representative, 2021
- College of Natural Sciences Dean's Council Astronomy Department Graduate Student Representative, 2019-2021
- Astronomy Department Graduate Student Representative, 2018 - 2019
- Astronomy Department Undergraduate Student Representative, 2015 - 2016

Conferences

- SOC Co-Chair - STScI Spring Symposium - Low Metallicity Environments, 2025-2026
- LOC - CEERS Team Meeting, May 2023

Workshops

- JWST Master Class Workshop; College Station, TX Feb 2020 - LOC
- JWST Master Class Workshop; Austin, TX Jan 2020 - LOC
- JWST Proposal Planning Workshop; Honolulu, HI, Jan 2020
- ALMA Community Day; Austin, TX Apr 2019
- JWST Proposal Planning Workshop; Austin, TX, Jun 2017
- ALMA Proposal and Data Reduction Workshop; Austin, TX Apr 2017

Fundraising

- Speaker - McDonald Observatory Board of Visitors Recruitment Meeting; Houston, TX, May 2019
- Speaker - McDonald Observatory Board of Visitors Meeting; Austin, TX, Feb 2019
- Speaker - McDonald Observatory Board of Visitors Recruitment Meeting; Dallas, TX, Nov 2018

COMMUNITY BUILDING AND SERVICE

Founder/President

- Co-Founder - Student Veterans Research Network , 2021 - Present
- Co-Founder, President - UT Student Veterans Association ; Austin, TX, 2013-2019
- Founder + Organizer - UT Women Veterans Group; Austin, TX 2013 - 2023

Member

- Representative - UT Military and Veteran Advisory Council; Austin, TX 2015 - 2023
- Founding Member - UT Association for Women in Astronomy Research and Education (AWARE) ; Austin, TX 2013 - 2023
- Member, Board Member - Austin Junior Forum Womens' Volunteer Organization; Austin, TX, 2013-2019

PUBLICATIONS

Lead Author: 7 - Citations: 612 | Total Publications: 67 - Citations: 5254 (as of 23-Oct-2025) — Link to ADS

First-Authored Papers

- Hutchison, T.A.,+ **Larson, R. L.** , Arrabal Haro, P., et al., *THRILS – The High-(Redshift+Ionization) Line Search: Program Description & Redshift Catalog* - 2025, Submitted
- Lambrides, E., + **Larson, R. L.** , + Hutchison, T.A., et al., *Discovery of Multiply Ionized Iron Emission Powered by an Active Galactic Nucleus in a z∼7 Little Red Dot* - 2025, arXiv:2509.09607 **(4 citations)**
- **Larson, R. L.** , Finkelstein, S. L., Kocevski, D. D., et al., *A CEERS Discovery of an Accreting Supermassive Black Hole 570 Myr after the Big Bang: Identifying a Progenitor of Massive $z > 6$ Quasars* - 2023, ApJL, 953, 29 **(375 citations)**
- **Larson, R. L.** , Hutchison, T. A., Bagley, M., et al., *Spectral Templates Optimal for Selecting Galaxies at $8 < z < 10$ with JWST* - 2022, ApJL, 958, 141 **(110 citations)**
- **Larson, R. L.** , Finkelstein, S. L., Hutchison, T. A., et al., *Searching for Islands of Reionization: A Potential Ionized Bubble Powered by a Spectroscopic Overdensity at z = 8.7* - 2022, ApJ, 930, 104 **(74 citations)**
- **Larson, R. L.** , Finkelstein, S. L., Pirzkal, N., et al., *Discovery of a $z = 7.452$, High-Equivalent-Width Lyman-α Emitter from the Hubble Space Telescope Faint Infrared Grism Survey* - 2018, ApJ, 858, 94 **(34 citations)**
- **Larson, R. L.** , Evans, N. J., II, Green, J. D., Yang, Y.-L., *Evidence for Decay of Turbulence by MHD Shocks in the ISM via CO Emission* - 2015, ApJ, 806, 70 **(15 citations)**

Contributing-Authored Papers

- Lambrides, E., **Larson, R. L.** , Garofali, K., et al., *The Case for Super-Eddington Accretion: Connecting Weak X-ray and UV Line Emission in JWST Broad-Line AGN During the First Gyr of Cosmic Time* - 2024, arXiv:2409.13047 **(81 citations)**
- Abdurro'uf, **Larson, R. L.** , Coe, D., et al., *JWST NIRSpec High-resolution Spectroscopy of MACS0647-JD at $z = 10.167$: Resolved* [O ii] *Doublet and Electron Density in an Early Galaxy* - 2024, arXiv:2404.16201 **(33 citations)**
- Hsiao, T. Y. Y., Álvarez-Márquez, J., Coe, D., et al., **(Larson, R. L. 7 of 33)** , *JWST MIRI detections of* Hα *and* [O iii] *and direct metallicity measurement of the $z = 10.17$ lensed galaxy MACS0647-JD* - 2024, arXiv:2404.16200 **(37 citations)**
- Cooper, O. R., Casey, C. M., Akins, H. B., et al., **(Larson, R. L. 10 of 36)** , *The Web Epoch of Reionization Lyα Survey (WERLS) I. MOSFIRE Spectroscopy of $z \sim 7$−8 Lyα Emitters* - 2023, arXiv:2309.06656 **(11 citations)**
- Fujimoto, S. L., Finkelstein, S. F., Burgarella, D., et al., **(Larson, R. L. 22 of 53)** , *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 **(60 citations)**
- Chavez Ortiz, O. A., Finkelstein, S. F., Davis, D., et al., **(Larson, R. L. 7 of 29)** , *Introducing the Texas Euclid Survey for Lyα (TESLA) Survey: Initial Study Correlating Galaxy Properties to Lyα Emission* - 2023, ApJ, 952, 110 **(10 citations)**
- Arrabal Haro, P., Dickinson, M., Finkelstein, S. F., et al., **(Larson, R. L. 14 of 37)** , *Confirmation and refutation of very luminous galaxies in the early universe* - 2023, Nature, 622, 707 **(243 citations)**
- Jung, I., Finkelstein, S. L., Arrabal Haro, P., et al., **(Larson, R. L. 8 of 32)** , *CEERS: Diversity of Lyman-Alpha Emitters during the Epoch of Reionization* - 2023, ApJ, 967, 73 **(69 citations)**
- Hsiao, T. Y. Y., Coe, D., Abdurrouf, et al., **(Larson, R. L. 4 of 42)** , *JWST NIRSpec spectroscopy of the triply-lensed $z = 10.17$ galaxy MACS0647 - JD* - 2023, arXiv:2305.03042 **(132 citations)**
- Fujimoto, S. L., Arrabal Haro, P., Dickinson, M., et al., **(Larson, R. L. 6 of 42)** , *CEERS Spectroscopic Confirmation of NIRCam-Selected z > 8 Galaxy Candidates with JWST/NIRSpec: Initial Characterization of their Properties* - 2023, ApJL, 949, 25 **(172 citations)**
- Finkelstein, S. L., Bagley, M., Ferguson, H. C., et al., **(Larson, R. L. 16 of 67)** , *CEERS Key Paper I: An Early Look into the First 500 Myr of Galaxy Formation with JWST* - 2022, ApJL, 946, 13 **(532 citations)**
- Jung, I., Finkelstein, S. L., **Larson, R. L.** , et al., *New $z > 7$ Lyman-alpha Emitters in EGS: Evidence of an Extended Ionized Structure at $z \sim 7.7$* - 2023, arXiv:2212.09850 **(36 citations)**
- Leung, G. C. K., Bagley, M., Ferguson, H. C., et al., **(Larson, R. L. 5 of 14)** , *The Spitzer-HETDEX Exploratory Large Area Survey. IV. Model-Based Multi-wavelength Photometric Catalog* - 2023, ApJS, 269, 46 **(1 citations)**
- Bradley, L. D., Coe, D., Brammer, G., et al., **(Larson, R. L. 5 of 27)** , *High-Redshift Galaxy Candidates at z=9−13 as Revealed by JWST Observations of WHL0137-08* - 2022, ApJ, 955, 13 **(80 citations)**
- Finkelstein, S. L., Bagley, M., Arrabal Haro, P., et al., **(Larson, R. L. 12 of 120)** , *A Long Time Ago in a Galaxy Far, Far Away: A Candidate z 12 Galaxy in Early JWST CEERS Imaging* - 2022, ApJ, 940, 55 **(357 citations)**
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