

ALLISON L. STROM

Northwestern University

Department of Physics and Astronomy

Center for Interdisciplinary Exploration and Research in Astrophysics (CIERA)

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RESEARCH INTERESTS

- Chemical evolution of galaxies, combining spectroscopic observations and models
- Physical properties of distant galaxies: star formation rates, stellar and gas masses, electron densities, ionization parameters, and ionizing radiation fields
- Massive stellar populations in galaxies: rest-UV and rest-optical signatures, contributions to feedback, and correlation with energetic outflows

EDUCATION

Ph.D., Astrophysics , California Institute of Technology <i>“Unveiling the Physical Conditions in Star-Forming Galaxies at the Peak of Galaxy Assembly”</i>	2017
M.S., Astrophysics , California Institute of Technology	2015
M.Phil., Astronomy , University of Cambridge	2011
B.S., Summa Cum Laude, Physics and Astronomy , University of Arizona	2010

PROFESSIONAL APPOINTMENTS

Assistant Professor of Physics and Astronomy Northwestern University, Evanston, IL	2022 – present
Carnegie-Princeton Postdoctoral Fellow Princeton University, Princeton, NJ	2020 – 2022
The Observatories of the Carnegie Institution for Science, Pasadena, CA	2017 – 2020
Graduate Research Assistant California Institute of Technology, Pasadena, CA	2014 – 2017
Graduate Teaching Assistant California Institute of Technology, Pasadena, CA	2012 – 2013
National Science Foundation Graduate Research Fellow California Institute of Technology, Pasadena, CA	2011 – 2015
Gates Cambridge Scholar University of Cambridge, Cambridge, UK	2010 – 2011

HONORS & AWARDS

Kavli Fellow , National Academy of Sciences	2024
Invited Plenary Speaker , American Astronomical Society	2022
Vera Rubin Fellow , The Observatories of the Carnegie Institution for Science	2017
Rodger Doxsey Travel Prize , American Astronomical Society	2017

John P. Huchra Citizenship Award , California Institute of Technology	2016
Inaugural Neugebauer Scholar , California Institute of Technology	2014

PRINCIPAL INVESTIGATOR GRANTS

Awarded \$415,572 as Science PI (detailed below) and \$154,187 as Admin PI (postdoc advisees are Science PI).

Northwestern University, Undergraduate Research Assistant Program “ <i>Characterizing Star-forming Galaxies at Cosmic Noon</i> ”	\$1,500
Caltech/JPL (for NASA Keck), PID 61/2023B_N099, 2023-2025 “ <i>Characterizing massive stars at high redshift with Keck+JWST</i> ”	\$13,750
Space Telescope Science Institute, JWST GO 2593, 2022-2025 “ <i>CECILIA: A direct-method metallicity calibration for Cosmic Noon through the Epoch of Reionization</i> ”	\$374,172
Caltech/JPL (for NASA Keck), PID 82/2021B_N118, 2021-2024 “ <i>Preparing for CECILIA: A direct-method metallicity calibration for Cosmic Noon through the Epoch of Reionization</i> ”	\$13,650
Caltech/JPL (for NASA Keck), PID 81/2020A_N056, 2020-2022 “ <i>The Universe in Transition: Emission Line Properties of Intermediate-Redshift Galaxies</i> ”	\$12,500

PRINCIPAL INVESTIGATOR TELESCOPE PROPOSALS

Ground-based telescopes typically do not award funding in addition to the observing time needed to conduct the proposed science, but the current “market rate” for purchasing time on these facilities is \$55k-\$110k/night. The proposals below represent an estimated ~\$2.8 million in telescope time.

Keck Observatory, 2024B “ <i>Determining the Origin of Neutral Oxygen Emission in z~2-3 Star-forming Galaxies</i> ”	2 nights
Keck Observatory, 2024A “ <i>Building on CECILIA: Characterizing the physical conditions in newly-discovered z~2 galaxies</i> ”	0.5 night
Keck Observatory, 2023B “ <i>Characterizing massive stars at high redshift with Keck+JWST</i> ”	2 nights
Keck Observatory, 2023B “ <i>Building on CECILIA: Characterizing the physical conditions in newly-discovered z~2 galaxies</i> ”	0.5 night
Keck Observatory, 2023A “ <i>The Universe in Transition: Tracking Changes in the Physical Properties of z~1.5 Galaxies</i> ”	1 night
Magellan Telescopes, 2022A “ <i>Star Formation and Feedback at Low Metallicity: Connecting Local Dwarfs and the High-redshift Universe</i> ”	3.5 nights
Keck Observatory, 2021B “ <i>Preparing for CECILIA: A direct-method metallicity calibration for Cosmic Noon through the Epoch of Reionization</i> ”	2 nights
Magellan Telescopes, 2021A “ <i>The Universe in Transition: Tracing Changes in the Spectra of z~0.8-1.6 Galaxies</i> ”	4 nights

Magellan Telescopes, 2021A <i>“Environmental Dependence of Stellar and Gas-phase Chemistry in Galaxy Groups and Clusters at $z\sim 0.1$”</i>	2 nights
Keck Observatory, 2020A <i>“The Universe in Transition: Emission Line Properties of Intermediate-Redshift Galaxies”</i>	0.5 night
Magellan Telescopes, 2020A <i>“The Universe in Transition: Emission Line Properties of $0.9 < z < 2$ Galaxies”</i>	4 nights
Magellan Telescopes, 2019B <i>“Local Laboratories for High-Redshift Massive Star Populations”</i>	2.5 nights
Magellan Telescopes, 2019A <i>“Local Laboratories for High-Redshift Massive Star Populations”</i>	3 nights
Magellan Telescopes, 2019A <i>“The Universe in Transition: Emission Line Properties of $0.9 < z < 2$ Galaxies”</i>	2 nights
Swope Telescope, 2019A	9 nights
Magellan Telescopes, 2018B <i>“Deciphering the Chemistry of Galaxies at the Peak of Galaxy Assembly”</i>	6 nights
Magellan Telescopes, 2018A <i>“Characterizing the Chemical Enrichment and Physical Conditions in Evolved Star-forming Galaxies at the Peak of Galaxy Assembly”</i>	4 nights
Magellan Telescopes, 2017B <i>“Characterizing the Chemical Enrichment and Physical Conditions in Evolved Star-forming Galaxies at the Peak of Galaxy Assembly”</i>	3 nights

SCIENTIFIC LEADERSHIP ROLES

CECILIA Survey, Principal Investigator

My program was among the first JWST observations. I lead a multi-institution team using the data to measure detailed galaxy chemistry and develop new tools for studying their spectra.

Subaru Prime Focus Spectrograph (PFS), US Lead for Emission Line Galaxy Science

The PFS Galaxy Evolution Survey will observe 250,000+ distant galaxies over ~120 nights, the largest sample of such galaxies to date. My group leads key aspects of the survey design, definition of the science case, and the development of spectroscopic analysis tools.

PFS Pathfinder, Principal Investigator

This program observed a representative sample of galaxies similar to those that will be targeted by the PFS Galaxy Evolution Survey. The PFS Pathfinder is a multi-institution team (including co-I's at Princeton, Pitt, and Michigan); my group NU are using these data to understand how best to analyze the forthcoming data.

Keck Baryonic Structure Survey (KBSS), Near-infrared Survey Scientist

I was responsible for the survey planning, data acquisition and reduction, software development, and catalog construction for 65+ observing nights using Keck/MOSFIRE.

CURRENT & FORMER GROUP MEMBERS

Postdoctoral fellows and associates

- Noah Rogers, Northwestern (current), Postdoctoral Associate
- Tim Miller, Northwestern (current), CIERA Postdoctoral Fellow
- Xinfeng Xu, Northwestern (current), CIERA Postdoctoral Fellow

- Bryan Scott, Northwestern (current), LSST Data Science Fellowship Program Fellow
- Guochao (Jason) Sun, Northwestern (current), CIERA Postdoctoral Fellow

Graduate students

- Beryl Hovis-Afflerbach, Northwestern (current), NSF Graduate Research Fellow
- Nathalie Korhonen Cuestas, Northwestern (current)
- Caroline von Raesfeld, Northwestern (current)
- Jacob Nibauer, Princeton (2021 – 2022, semester project), now an NSF Graduate Research Fellow

Undergraduate students

- Audrey Clarendon, Northwestern (current)
- Katarina Viana de Souza Andrade, Northwestern (current)
- Masha Kilibarda, Haverford College (2024), CIERA REU student
- Menelaos Raptis, Franklin & Marshall (2024), visiting undergraduate researcher
- Micaela Berglund, Pomona College (2020), Carnegie summer student
- Jakob Helton, Princeton (2019 – 2021, senior thesis), now a PhD student at Arizona
- Chelsea Adelman, Cal Poly Pomona (2018), Carnegie summer student, now a PhD student at UC Irvine

INVITED TALKS

Invited speaker for 63 presentations. Planned future talks are denoted by an asterisk.

Research seminars and colloquia

Texas A&M Mitchell Institute for Fundamental Physics and Astronomy Seminar	Feb 2024
Arizona State University Beus Center for Cosmic Foundations Seminar (inaugural year)	Jan 2024
University of Wisconsin-Milwaukee Center for Gravitation, Cosmology & Astrophysics Seminar	Dec 2023
University of Hawaii Institute for Astronomy Colloquium	Nov 2023
Aspen Center for Physics Colloquium	Aug 2023
University of Toledo Physics & Astronomy Colloquium	Apr 2023
Heidelberg Joint Astronomical Colloquium	Feb 2023
University of Illinois Urbana-Champaign Astrophysics Colloquium	Dec 2022
Notre Dame Physics and Astronomy Colloquium	Nov 2022
240th American Astronomical Society Meeting Plenary Lecture	Jun 2022
Rutgers Astrophysics Seminar	Apr 2022
Wayne State University Physics and Astronomy Colloquium	Mar 2022
Northwestern University Physics and Astronomy Colloquium	Mar 2022
Penn State Astronomy Seminar	Feb 2022
George Mason University Physics and Astronomy Colloquium	Feb 2022
Texas A&M Astronomy Seminar	Dec 2021
University of Alabama in Huntsville Astronomy Seminar	Nov 2021

UCLA Astronomy & Astrophysics Lunch Talk	Jan 2021
Carnegie Observatories Colloquium	Dec 2020
CIERA Astrophysics Seminar	Mar 2020
UC San Diego Astrophysics Seminar	Jan 2020
University of Western Australia International Centre for Radio Astronomy Research (ICRAR) Colloquium	Nov 2019
Monash University Centre for Astrophysics (MoCA) Seminar	Nov 2019
Kavli Institute for the Physics and Mathematics of the Universe (IPMU) Seminar	Nov 2019
Harvard-Smithsonian Center for Astrophysics (CfA) Galaxies & Cosmology Seminar	Feb 2019
UC Riverside Astronomy Seminar	Jan 2018
UC Berkeley Cosmology Group Seminar	Nov 2016
Kavli Institute for Particle Astrophysics and Cosmology (KIPAC) Seminar	Oct 2016
UC Berkeley Cosmology Group Seminar	Nov 2016
Max Planck Institute for Astrophysics (MPA) Cosmology Seminar	June 2016
Scientific conferences	
Galaxies at Crossroads: Outflows and IMF in the VLT/ELT/ALMA/JWST Era <i>Brno, Czech Republic</i>	Sep 2024*
Canadian Institute for Advanced Research (CIFAR) Gravity & Extreme Universe <i>Whitehorse, Canada</i>	June 2024*
Gravitational waves: a new ear on the chemistry of galaxies <i>Lorentz Center, Leiden, Netherlands</i>	Apr 2024
Arthur M. Wolfe Symposium, The Sea Meets the Stars <i>Scripps Institute for Oceanography, San Diego, CA</i>	Mar 2024
The chronology of the very early Universe according to JWST: the first Gyr <i>International Space Science Institute, Bern, Switzerland</i>	Mar 2024
Canadian Institute for Advanced Research (CIFAR) Gravity & Extreme Universe <i>Canmore, Canada</i>	May 2023
A new era in extragalactic astronomy: early results from JWST <i>Institute of Astronomy, Cambridge, UK</i>	Mar 2023
IAU Symposium 361, Massive Stars Near and Far <i>Ballyconnell, Ireland</i>	May 2022
Chemical Abundances in Gaseous Nebulae <i>São José dos Campos, Brazil</i>	May 2021
Metals in Galaxies, Near and Far <i>Lorentz Center, Leiden, Netherlands</i>	May 2019
Understanding Emission-line Galaxies for the Next Generation of Cosmological Surveys <i>Teruel, Spain</i>	Sep 2018
Characterizing Galaxies with Spectroscopy with a View for JWST <i>Lorentz Center, Leiden, Netherlands</i>	Oct 2017

Emission Line Galaxies with Multi-Object Spectrographs <i>Institute of Astronomy, Cambridge, UK</i>	Sep 2017
Advances in Galaxy Evolution <i>Schloss Ringberg, Germany</i>	Jun 2017
3D-HST: Census, Evolution, Physics <i>New Haven, CT</i>	Nov 2015
Understanding Nebular Emission in High-Redshift Galaxies <i>Pasadena, CA</i>	Jul 2015

Public talks and lectures

Northwestern University Physics Horizons Seminar	Apr 2024
North Central Michigan College Lifelong Learning Club	Nov 2023
Northwestern Women in Science and Engineering Research Fall Welcome	Oct 2023
CIERA Spring 2023 Astronomy Night Out	May 2023
Campbell Creek Science Center Fireside Chat	Oct 2022
Northwestern Alumni Association, Tucson chapter	Oct 2022
Northwestern University Osher Institute for Life Long Learning	Sep 2022
The Chicago Network, “Exploring the Stars with the Experts Through JWST”	Aug 2022
North Central Michigan College Lifelong Learning Club	Feb 2022
Haddonfield Public Library, invited JWST Subject Matter Expert (SME)	Dec 2021
New Jersey Astronomical Society	Aug 2021
Riverside Astronomical Society	Sep 2020
Pasadena Community College lecture series “Carnegie @ PCC”	Nov 2019
Astronomy on Tap Los Angeles	Jun 2019
National Coalition of Girls’ Schools annual conference	Jun 2019
Carnegie-Huntington Astronomy Lecture Series	Apr 2019
Carnegie Observatories “Lunch with an Astronomer” series	May 2018

OTHER SCIENTIFIC PRESENTATIONS

Contributed talks at scientific conferences

First Stars VII in NYC <i>Flatiron Institute, New York City, NY</i>	May 2024*
First Light conference at MIT <i>Cambridge, MA</i>	Jun 2023
Roman Science Team Community Briefing (on behalf of EXPO and PFS) <i>Virtual</i>	Nov 2021
Subaru-Roman Synergistic Observations Workshop IV <i>Virtual</i>	Feb 2021
The Rise of Metals and Dust in Galaxies through Cosmic Time <i>Marseille, France</i>	Oct 2020

The Cosmic Baryon Cycle: Impact on Galaxy Evolution <i>Carlsbad, CA</i>	Sep 2019
UCSC Galaxy Formation Workshop <i>Santa Cruz, CA</i>	Aug 2019
Life and Death of Star-forming Galaxies <i>Perth, Australia</i>	Mar 2019
GalFRESCA <i>Pasadena, CA</i>	Aug 2018
JWST/Euclid Synergy conference <i>Noordwijk, Netherlands</i>	Jul 2018
Spectral Diagnostics to Explore the Cosmic Dawn with JWST <i>Baltimore, MD</i>	Jul 2017
229th American Astronomical Society (AAS) Meeting <i>Grapevine, TX</i>	Jan 2017
Keck Science Meeting <i>Pasadena, CA</i>	Sep 2016
32nd Institut d'Astrophysique de Paris (IAP) Colloquium <i>Paris, France</i>	Jun 2016
50 Years of Infrared Astronomy <i>Pasadena, CA</i>	Nov 2015
UCSC Galaxy Formation Workshop <i>Santa Cruz, CA</i>	Aug 2015
Keck Science Meeting <i>Pasadena, CA</i>	Oct 2014

Department seminars and informal talk series

UT Cosmic Frontier Center Group Meeting	Feb 2024
UChicago Astronomy and Astrophysics Open Group Seminar	Feb 2020
National Optical Astronomy Observatory (NOAO) Flash Talk	Oct 2018
UT Austin Exgal Seminar	Dec 2016
Yale Galaxy Lunch Talk	Nov 2016
Harvard-Smithsonian Center for Astrophysics (CfA) Quasar Tea	Nov 2016
MIT Brown Bag Lunch Talk	Nov 2016
National Optical Astronomy Observatory (NOAO) Flash Talk	Oct 2016
Carnegie Observatories Lunch Talk	Oct 2016
Leiden Observatory Lunch Talk	Jun 2016
Space Telescope Science Institute (STScI) Galaxy Journal Club	May 2014

SELECTED MEDIA APPEARANCES

Astronomy, " <u>JWST uncovers a surprising amount of nickel in adolescent galaxies</u> "	Nov 2023
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Reuters, <u>“Webb space telescope spies precocious ‘teenage’ galaxies”</u>	Nov 2023
Northwestern Now, <u>“‘Teenage galaxies’ are unusually hot, glowing with unexpected elements”</u>	Nov 2023
WGN-TV Evening News, <u>Cover Story on the James Webb Space Telescope</u>	Aug 2022
Evanston RoundTable, <u>“Northwestern astrophysics professor leads early Webb Telescope project”</u>	Sep 2022
Chicago Sun-Times, <u>“Awarded time with the James Webb Space Telescope, astronomers from Northwestern and University of Chicago are over the moon”</u>	Jul 2022
WHYY Radio Times, <u>“The Webb Telescope and the mysteries of the universe”</u>	Jul 2022
Northwestern Now, <u>“Northwestern astrophysicists snag early time on James Webb Space Telescope”</u>	Jul 2022
Lost LA TV series, <u>“Discovering the Universe: Exploring the Cosmos Atop Mount Wilson”</u>	Nov 2019

ACADEMIC & SCIENTIFIC COMMUNITY SERVICE

Habitable Worlds Observatory (HWO) Science, Technology, and Architecture Review Team (START), Ionizing Photons sub-working group co-chair	2024 – present
James Webb Space Telescope (JWST) Cycle 3 Telescope Allocation Committee, discussion panelist	2024
CIERA Astrophysics Seminar Committee, chair	2023 – present
CIERA Telescope Allocation Committee, member	2023 – present
Brinson Prize Postdoctoral Fellowship selection committee, member	2023
Aspen Center for Physics, lead organizer for “Revealing the Detailed Astrophysics of Early Galaxies with JWST” summer workshop	2023
2023 Keck Science Meeting, Scientific Organizing Committee member	2023
Northwestern Physics and Astronomy Graduate Admissions Committee, member	2023
CIERA Postdoctoral Fellowship Selection Committee, member	2023
NASA Infrared Science and Technology Integration Group, leadership council member	2022 – present
Northwestern Physics and Astronomy Committee on Equity and Inclusion (CEI), member	2022 – present
CIERA Mentoring Program, faculty mentor	2022 – present
NASA Keck Time Allocation Committee, panelist and panel chair	2021 – 2023
Princeton Astrophysics Department, colloquium organizer	2021 – 2022
Princeton Astronomy Graduate Student Mentoring Initiative, postdoc mentor	2021 – 2022
Future Investigators in NASA Earth and Space Science and Technology (FINESST), external panelist	2021
NSF Division of Astronomical Sciences, Astronomy and Astrophysics Research Grants, review panelist	2021
Hubble Space Telescope Cycle 28 & 29 Telescope Allocation Committee, external panelist	2020 – 2021
Princeton Astrophysics Department climate committee, postdoc representative	2020 – 2022
Carnegie Observatories Diversity, Equity, and Inclusion (DEI) program, chair	2019 – 2020
Caltech Women Mentoring Women program, mentor	2016 – 2020

Caltech Graduate Student Council Board of Directors, vice chair	2016 – 2017
Caltech Title IX Advisory Board, member	2015 – 2017
Peer reviewer for The Astrophysical Journal (ApJ), Monthly Notices of the Royal Astronomical Society (MNRAS), and Astronomy & Astrophysics (A&A)	ongoing

OTHER EDUCATION & PUBLIC OUTREACH

YWCA Camp Rosie, STEAM workshop leader	2020
Pasadena YWCA TechGYRLS, after-school workshop leader	2019
Step Up Women’s Network Los Angeles chapter, mentor <i>program connects professional women with girls from under-resourced communities</i>	2018 – 2019
Institute for Scientist & Engineer Educators (ISEE) Professional Development Program <i>trains early career researchers in backwards design and inquiry-based education</i>	2018
Western Association of Schools and Colleges (WASC) Academic Resource Conference <i>presented successful strategies for using student engagement to effect institutional change</i>	2016

PUBLICATIONS AS FIRST AUTHOR OR WITH SIGNIFICANT CONTRIBUTIONS

This section includes papers based on Keck Baryonic Structure Survey (KBSS) data products that resulted directly from my work as the Near-infrared Survey Scientist and where I contributed significantly to the scientific analysis and discussion.

‡ indicates publications where the first author was a direct supervisee or mentee.

‡ Rogers, N. S. J., **Strom, A. L.** et al., “CECILIA: Direct O, N, S, and Ar Abundances in Q2343-D40, a Galaxy at $z \sim 3$,” *ApJL*, 964, 12 (2024)

Strom, A. L. et al., “CECILIA: The Faint Emission Line Spectrum of $z \sim 2-3$ Star-forming Galaxies,” *ApJL*, 958, 11 (2023)

Runco, J. N. et al., including **ALS**, “Reconciling the Results of the $z \sim 2$ MOSDEF and KBSS-MOSFIRE Surveys,” *MNRAS*, 513, 3871 (2022)

‡ Helton, J. M., **Strom, A. L.** et al., “The Nebular Properties of Star-forming Galaxies at Intermediate Redshift from the Large Early Galaxy Astrophysics Census,” *ApJ*, 934, 81 (2022), *undergraduate student work supervised by Strom*

Strom, A. L. et al., “Chemical Abundance Scaling Relations for Multiple Elements in $z \sim 2-3$ Star-forming Galaxies,” *ApJ*, 925, 116 (2022)

Trainor, R. F., **Strom, A. L.**, et al., “Predicting Ly α Emission from Galaxies via Empirical Markers of Production and Escape in the KBSS,” *ApJ*, 887, 85 (2019)

‡ Theios, R. L., Steidel, C. C., **Strom, A. L.**, et al., “Dust Attenuation, Star Formation, and Metallicity in $z \sim 2-3$ Galaxies from KBSS-MOSFIRE,” *ApJ*, 871, 128 (2019)

Strom, A. L., et al., “Measuring the Physical Conditions in High-redshift Star-forming Galaxies: Insights from KBSS-MOSFIRE,” *ApJ*, 868, 117 (2018)

Strom, A. L., et al., “Nebular Emission Line Ratios in $z \sim 2-3$ Star-Forming Galaxies with KBSS-MOSFIRE: Exploring the Impact of Ionization, Excitation, and Nitrogen-to-Oxygen Ratio,” *ApJ*, 836, 164 (2017)

Trainor, R. F., **Strom, A. L.**, et al., “The Rest-Frame Optical Spectroscopic Properties of Ly α -Emitters at $z \sim 2.5$: The Physical Origins of Strong Ly α Emission,” *ApJ*, 832, 171 (2016)

Steidel, C. C., **Strom, A. L.**, et al. 2016, “Reconciling the Stellar and Nebular Spectra of High-Redshift Galaxies,” *ApJ*, 826, 159 (2016)

- Shapley, A. E., Steidel, C. C., **Strom, A. L.**, et al., “Q1549-C25: A Clean Source of Lyman-Continuum Emission at $z = 3.15$ ”, *ApJL*, 826, 24 (2016)
- Trainor, R. F., Steidel, C. C., **Strom, A. L.**, et al., “The Spectroscopic Properties of Ly α -Emitters at $z \sim 2.7$: Escaping Gas and Photons from Faint Galaxies”, *ApJ*, 809, 89 (2015)
- Steidel, C. C., Rudie, G. C., **Strom, A. L.**, et al., “Strong Nebular Line Ratios in the Spectra of $z \sim 2-3$ Star Forming Galaxies: First Results from KBSS-MOSFIRE”, *ApJ*, 795, 165 (2014)

ALL OTHER REFEREED PUBLICATIONS (in reverse chronological order)

- Arellano-Córdova, Karla Z. et al., including **ALS**, “CLASSY IX: The Chemical Evolution of the Ne, S, Cl, and Ar Elements,” accepted by *ApJ*, arXiv:2403.08401
- Wang, S. et al., including **ALS**, “High-Resolution Chemical Abundances of the Nyx Stream,” *ApJ*, 955, 129 (2023)
- Erb, D. K. et al., including **ALS**, “The Circumgalactic Medium of Extreme Emission Line Galaxies at $z \sim 2$: Resolved Spectroscopy and Radiative Transfer Modeling of Spatially Extended Lyman-alpha Emission in the KBSS-KCWI Survey,” *ApJ*, 953, 118 (2023)
- Holoien, T. W.-S. et al., including **ALS**, “Examining the Properties of Low-Luminosity Hosts of Type Ia Supernovae from ASAS-SN,” *ApJ*, 950, 108 (2023)
- Orr, M. E. et al., including **ALS**, “Spiral Arms are Metal Freeways: Azimuthal Gas-Phase Metallicity Variations in Simulated Cosmological Zoom-in Flocculent Disks,” *MNRAS*, 521, 3708 (2023)
- Pahl, J. et al., including **ALS**, “The connection between the escape of ionizing radiation and galaxy properties at $z \sim 3$ in the Keck Lyman Continuum Spectroscopic Survey,” *MNRAS*, 521, 3247 (2023)
- James, B. et al., including **ALS**, “CLASSY II: A technical Overview of the COS Legacy Archive Spectroscopic Survey,” *ApJS*, 262, 37 (2022)
- Rector, T. A. et al., including **ALS**, “The Rate and Spatial Distribution of Novae in M31 as Determined by a 20 Year Survey,” *ApJ*, 936, 117 (2022)
- Berg, D. et al., including **ALS**, “The COS Legacy Archive Spectroscopy Survey (CLASSY) Treasury Atlas,” *ApJS*, 261, 31 (2022)
- Garg, P. et al., including **ALS**, “The BPT Diagram in Cosmological Galaxy Formation Simulations: Understanding the Physics Driving Offsets at High-Redshift,” *ApJ*, 926, 80 (2022)
- Chen, Y., et al., including **ALS**, “The KBSS-KCWI survey: the connection between extended Ly α haloes and galaxy azimuthal angle at $z \sim 2-3$ ”, *MNRAS*, 508, 19 (2021)
- Chen, Y., et al., including **ALS**, “The Keck Baryonic Structure Survey: using foreground/background galaxy pairs to trace the structure and kinematics of circumgalactic neutral hydrogen at $z \sim 2$ ”, *MNRAS*, 499, 2 (2020)
- Rector, T. A., Prato, L., **Strom, A. L.**, “Herbig-Haro Outflows in Circinus W”, *AJ*, 160, 4 (2020)
- Rudie, G. C., et al., including **ALS**, “The Column Density, Kinematics, and Thermal State of Metal-Bearing Gas within the Virial Radius of $z \sim 2$ Star-Forming Galaxies in the Keck Baryonic Structure Survey”, *ApJ*, 885, 61 (2019)
- Steidel, C. C., et al., including **ALS**, “The Keck Lyman Continuum Spectroscopic Survey (KLCS): The Emergent Ionizing Spectrum of Galaxies at $z \sim 3$ ”, *ApJ*, 869, 123 (2018)
- Law, D. R., et al., including **ALS**, “Imaging Spectroscopy of Ionized Gaseous Nebulae around Optically Faint AGNs at Redshift $z \sim 2$ ”, *ApJ*, 866, 119 (2018)
- Du, X., et al., including **ALS**, “The Redshift Evolution of Rest-UV Spectroscopic Properties in Lyman-break Galaxies at $z \sim 2-4$ ”, *ApJ*, 860, 75 (2018)
- Miller, T. B., et al., including **ALS**, “A massive core for a cluster of galaxies at a redshift of 4.3”, *Nature*, 556, 469 (2018)

- Drout, M. R., et al., including **ALS**, “Light curves of the neutron star merger GW170817/SSS17a: Implications for r-process nucleosynthesis”, *Science*, 358, 1570 (2017)
- Turner, M. L., et al., including **ALS**, “A comparison of observed and simulated absorption from H I, C IV, and Si IV around $z \approx 2$ star-forming galaxies suggests redshift-space distortions are due to inflows”, *MNRAS*, 471, 690 (2017)
- Kelly, P. L., et al., including **ALS**, “SN Refsdal: Classification as a Luminous and Blue SN 1987A-like Type II Supernova”, *ApJ*, 831, 205 (2016)
- Erb, D. K., et al., including **ALS**, “A High Fraction of Ly-alpha-Emitters Among Galaxies with Extreme Emission Line Ratios at $z \sim 2$ ”, *ApJ*, 830, 52 (2016)
- Ma, X., et al., including **ALS**, “Binary stars can provide the ‘missing photons’ needed for reionization”, *MNRAS*, 459, 3614 (2016)
- Shimakawa, R., et al., including **ALS**, “Correlation between star formation activity and electron density of ionized gas at $z = 2.5$ ”, *MNRAS*, 451, 1284 (2015)
- Turner, M. L., et al., including **ALS**, “Detection of hot, metal-enriched outflowing gas around $z \approx 2.3$ star-forming galaxies in the Keck Baryonic Structure Survey”, *MNRAS*, 450, 2067 (2015)
- Turner, M. L., et al., including **ALS**, “Metal-line absorption around $z \approx 2.4$ star-forming galaxies in the Keck Baryonic Structure Survey”, *MNRAS*, 445, 794 (2014)
- Erb, D. K., et al., including **ALS**, “The Ly α Properties of Faint Galaxies at $z \sim 2-3$ with Systemic Redshifts and Velocity Dispersions from Keck-MOSFIRE”, *ApJ*, 795, 33 (2014)
- Wardlow, J. L., et al., including **ALS**, “HerMES: Candidate Gravitationally Lensed Galaxies and Lensing Statistics at Submillimeter Wavelengths”, *ApJ*, 762, 59 (2013)
- For, B.-Q., et al., including **ALS**, “Modeling the System Parameters of 2M 1533+3759: A New Longer Period Low-Mass Eclipsing sdB+dM Binary”, *ApJ*, 708, 253 (2010)

CITATION METRICS

h-index = 28

Total refereed publications = 43

Total refereed citations = 4022