

ALIZA BEVERAGE

Email: abeverage@berkeley.edu

Website: alizabeverage.github.io

EDUCATION

University of California Berkeley, *Ph.D, Astrophysics* *May 2025 (expected)*
Advisors: Mariska Kriek and Dan Weisz
University of California Berkeley, *Masters of Arts, Astrophysics* *August 2020*
University of Minnesota Twin Cities, *Bachelor of Science, Physics and Astrophysics* *June 2018*
Advisor: Claudia Scarlata

RESEARCH INTERESTS

The formation and evolution of massive galaxies, chemical abundances, chemical evolution, star-formation quenching, stellar population modeling

RESEARCH POSITIONS & EXPERIENCE

| | |
|---|-------------|
| NSF Graduate Research Fellow | 2019–2024 |
| Undergraduate Research Assistant | 2015–2019 |
| University of Minnesota <i>Advisors:</i> Claudia Scarlata, Robert Gehrz | |
| SURF Summer Research Student | Summer 2018 |
| Cosmic DAWN Center, University of Copenhagen <i>Advisor:</i> Gabe Brammer | |
| REU Summer Research Student | Summer 2017 |
| Center for Astrophysics Harvard & Smithsonian <i>Advisors:</i> Matthew Ashby, Howard Smith | |
| REU Summer Research Student | Summer 2016 |
| LIGO Collaboration, Louisiana State University <i>Advisor:</i> Thomas Corbitt | |

SELECTED AWARDS AND HONORS

| | |
|--|------------------|
| NSF Graduate Research Fellowship | 2019–2024 |
| Robert J. Trumpler Graduate Student Excellence Award | May 2024 |
| H2H8 Fellowship | 2022 |
| AAS International Travel Grant | 2021, 2023, 2024 |
| Outstanding Astronomy GSI | 2021 |
| Maria Cranor Fellowship | 2019–2025 |
| Astronaut Scholarship | 2018–2019 |

TELESCOPE PROPOSALS

James Webb Space Telescope (as co-PI)

2. Cycle 3: [GO 5629](#), Extremely deep spectroscopy of quiescent galaxies at $z \sim 0.7$: A direct measurement of the stellar initial mass function beyond the low-redshift universe (40.3 hrs NIRspec)
1. Cycle I: [GO 2110](#), Ultra-deep continuum spectroscopy of quiescent galaxies at $1.0 < z < 2.5$: chemical abundances and stellar kinematics (22.7 hrs NIRspec)

Observing experience:

Keck I/II Telescopes (LRIS/MOSFIRE, 10 nights)

PRESENTATIONS

Seminars

| | |
|-------------------------|------------|
| OSU galaxy hour | May 2024 |
| <i>Colloquium</i> , WSU | Nov 2023 |
| Edinburgh coffee talk | June 2023 |
| Princeton Galread | May 2022 |
| Berkeley lunch talk | 2021, 2023 |

Conference talks

| | |
|--|-----------|
| AGN feedback and Star Formation Across Cosmic Scales and Time, Sirolo | Sept 2024 |
| IAU Symposium 391: The First Chapters of our Cosmic History with <i>JWST</i> | Aug 2024 |
| A life devoted to stellar populations, Tenerife | Oct 2023 |
| Keck Science Meeting | Sept 2023 |
| *UC Santa Cruz Galaxy Workshop | Aug 2023 |
| Charting the metallicity evolution history of the Universe, Catania | Sept 2022 |
| STScI Multi-Object Spectroscopy Workshop | May 2021 |

Invited speaker*TEACHING & MENTORSHIP**

| | |
|--|-------------|
| Research mentor to Yilun Ma, University of California Berkeley | 2020 – 2022 |
| Publication: <i>Two Transitional Galaxies with AGN-Driven Outflows at $z \sim 2$ (in prep.)</i> | |
| *Graduate Student Instructor , UC Berkeley 7B: Introduction to Astrophysics II | Spring 2020 |
| Graduate Student Instructor , UC Berkeley 7A: Introduction to Astrophysics I | Fall 2019 |

Awarded Outstanding Astronomy GSI*OUTREACH & SERVICE**

POWER – Bay Area: Student-led mentoring program and workshop series for Bay Area community college students interested in the physical sciences. powerbayarea.studentorg.berkeley.edu

POWER Coordinator 2022 – Present

Organized workshops for POWER participants that included financial aid and support network presentations, career and transfer student panels, and lab tours

POWER Mentor 2021

Professional development mentorship to a Bay Area community college student

MPS Scholars Mentor 2023

Professional development mentorship to a Berkeley undergrad

MPS Scholars Retreat Spring 2024

Graduate student panelist at professional development retreat for Berkeley undergrads

Climate & DEI Committee Rep 2020 – 2021

Graduate student representative on the Berkeley Astronomy DEI committee

A day in the life of a scientist 2022—2024

Presentation to 80 4th graders about my career as an astrophysicist

Referee ApJ, A&A 2021 – Present

Respect is Part of Research Facilitator 2021

Bay Area Science Festival Discovery Day Volunteer April 2022

PUBLICATIONS

4 First-author, 3 Second- and Third-author ([ADS](#))

First-author:

4. *Carbon and Iron Deficiencies in Quiescent Galaxies at $z=1-3$ from JWST-SUSPENSE: Implications for the Formation Histories of Massive Galaxies*
Beverage, A. G., Slob, M., Kriek, M., et al. in review at ApJ, ([arXiv](#))
3. *The Heavy Metal Survey: The Evolution of Stellar Metallicities, Abundance Ratios, and Ages of Massive Quiescent Galaxies since $z \sim 2$*
Beverage, A. G., Kriek, M., Suess, K. A., et al. 2024, ApJ, 966, 234, DOI: [10.3847/1538-4357/ad372d](#) [citations: 8]
2. *From Carbon to Cobalt: Chemical Compositions and Ages of $z \sim 0.7$ Quiescent Galaxies*
Beverage, A. G., Kriek, M., Conroy, C., et al. 2023, ApJ, 948, 140, DOI: [10.3847/1538-4357/acc176](#) [citations: 11]
1. *Elemental Abundances and Ages of $z \sim 0.7$ Quiescent Galaxies on the Mass-Size Plane: Implication for Chemical Enrichment and Star Formation Quenching*
Beverage, A. G., Kriek, M., Conroy, C., et al. 2021, ApJL, 917 L1, DOI: [10.3847/2041-8213/ac12cd](#) [citations: 22]

Second- and Third-author:

4. *Modeling the Ages and Chemical Abundances of Elliptical Galaxies*
Marcelina Gountanis, N., Weinberg, D. H., **Beverage, A. G.**, et al. in review at ApJ, ([arXiv](#))
3. *Age and metal gradients in massive quiescent galaxies at $0.6 < z < 1.0$: Implications for quenching and assembly histories*
Cheng, C., Kriek, M., **Beverage, A. G.**, et al. accepted at MNRAS, ([MNRAS](#))
2. *The JWST-SUSPENSE Ultradeep Spectroscopic Program: Survey Overview and Star-Formation Histories of Quiescent Galaxies at $1 < z < 3$*
Slob, M., Kriek, M., **Beverage, A. G.**, et al. in review at ApJ, ([arXiv](#)) [citations: 4]
1. *The Heavy Metal Survey: Star Formation Constraints and Dynamical Masses of 21 Massive Quiescent Galaxies at $z = 1.3-2.3$*
Kriek, M., **Beverage, A. G.**, with the Heavy Metal team, et al. 2024, ApJ, 966, 1, DOI: [10.3847/1538-4357/ad2df9](#) [citations: 7]