

ALIZA BEVERAGE

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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, UC Berkeley	2019–2024
Undergraduate Research Assistant, UMN	2015–2019
SURF Summer Research Student, Cosmic DAWN Center, Copenhagen	Summer 2018
REU Summer Research Student, CfA Harvard & Smithsonian	Summer 2017
REU Summer Research Student, LIGO Collaboration, LSU	Summer 2016

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

Skype a Scientist 2021

Grad Student Postdoc Seminar Coordinator 2022 – Present

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]