

CURRICULUM VITAE
Mika Lambert

Santa Cruz, CA

Email: mlamber1@ucsc.edu

Website: <https://mikalambert.github.io/>

EDUCATION

University of California–Santa Cruz

Advisor: Constance Rockosi

Ph.D. Astronomy and Astrophysics

Expected June, 2028

M.S. Astronomy and Astrophysics

June 16, 2025

University of Arizona

B.S. Astronomy (Minors in Physics, Math, and Japanese)

May 12, 2023

Summa Cum Laude

PUBLICATIONS (first author: 3 total: 12)

FIRST AUTHOR

Mika Lambert, Constance Rockosi, Sergey Koposov, Ting S. Li, et. al. (2026) [Signatures of a Tidally Induced Spiral Arm at the Anticenter of the Milky Way and a Kinematically Extended Anticenter Stream Using DESI DR2](#)

Mika Lambert, Donghyeon J. Khim, Dennis Zaritsky, Richard Donnerstein. (2024) [Systematically Measuring Ultra-diffuse Galaxies \(SMUDGes\). VI. Nuclear Star Clusters](#)

Mika Lambert, Chad F. Bender, Shubham Kanodia, Caleb I. Canas, et. al. (2023) [TOI-5375: An Object at the Hydrogen Burning Limit Orbiting an Early M-type Star](#)

CONTRIBUTING AUTHOR

Songting Li, et. al. incl. **Mika Lambert**. (2026) [The velocity field of our Milky Way outer stellar halo based on DESI DR2](#)

Nasser Mohammed, et. al. incl. **Mika Lambert**. (2026) [The Kinematically Hot, Extremely Metal-Poor C-19 Stellar Stream in DESI DR2](#)

Songting Li, et. al. incl. **Mika Lambert**. (2026) [The Milky Way Stellar Halo Is Twisted and Doubly Broken: Insights from DESI DR2 Milky Way Survey Observation](#)

Jiani, Ding et.al. incl. **Mika Lambert**. (2025) [The Draco Dwarf Spheroidal Galaxy in the First Year of Dark Energy Spectroscopic Instrument Data](#)

Gustavo E. Medina, et. al. incl. **Mika Lambert**. (2025) [The mass of the Milky Way from outer halo stars measured by DESI DR1](#)

Arjun Dey, et. al. incl. **Mika Lambert**. (2025) [The Backup Program of the Dark Energy Spectroscopic Instrument's Milky Way Survey](#)

Gustavo E. Medina, et. al. incl. **Mika Lambert**. (2025) [The DESI Y1 RR Lyrae catalog II: The metallicity dependency of pulsational properties, the shape of the RR Lyrae instability strip, and metal rich RR Lyrae](#)

Christian Aganze, et. al. incl. **Mika Lambert**. (2025) [The Cocytos Stream: A Disrupted Globular Cluster from Our Last Major Merger?](#)

Donghyeon J. Khim, Dennis Zaritsky, **Mika Lambert**, Richard Donnerstein. (2024) [Properties of Nuclear Star Clusters in Low Surface Brightness Galaxies](#)

Talks and Posters

Near Field Cosmology in the Era of Big Data – Talk, University of Toronto	July 21, 2026
American Astronomical Society 247, Special Session – Talk, Phoenix, AZ	Jan 6, 2025
DESI Collaboration Pre-Meeting – Talk, Tucson, AZ	Dec 4, 2025
DESI Collaboration Meeting – Talk, Lawrence Berkeley National Lab, CA	July 10, 2025
Gravity in the Local Group – Talk, Carnegie Mellon University, PA	June 5, 2025
UCSC FLASH Seminar – Talk, UC–Santa Cruz, CA	April 25, 2025
DESI Milky Way Survey Workshop – Talk, University of Toronto	Aug 12, 2024
USPA Symposium – Poster, Santa Cruz, CA	June 3, 2024
American Astronomical Society 241– Poster, Seattle, WA	Jan 12, 2023
<i>REMOTE TALKS</i>	
DESI Milky Way Survey Telecon – Talk, remote	Sept 25, 2025
DESI Milky Way Survey Telecon – Talk, remote	March 6, 2025

SCHOLARSHIPS, AWARDS, AND GRANTS

Osterbrock Minigrant (UCSC)

- UCSC Galaxy Grads Community Engagement (PI) \$250	2026
- Slug-gazing Outreach Training for Grads (PI) \$325	2026
- Slug-gazing Outreach Training for Grads (PI) \$250	2025
- UCSC Astronomy Graduate Student Retreat (Co-PI) \$2,575	2025
- Creating Community Through Coworking (Co-PI) \$500	2025

NSF Graduate Research Fellowship (UCSC) 2023-2028

Wildcat Distinction Tuition Scholarship (UArizona) 2019-2023

Galileo Circle Scholar (UArizona) 2022

<i>William Scott and Elizabeth P. Jenkins Scholarship (UArizona)</i>	2022
<i>Angelos C. Langadas Astronomy Scholarship (UArizona)</i>	2022
<i>Glenn C. Purviance Scholarship (UArizona)</i>	2022
<i>Bychinsky A. Elaine Astronomy Scholarship (UArizona)</i>	2020, 2021
<i>The Art of Planetary Science gallery artist (UArizona)</i>	2021, 2022

RESEARCH EXPERIENCE

Graduate Student Researcher September 2023-Present
University of California–Santa Cruz

Advisor: Connie Rockosi

Using the Dark Energy Spectroscopic Instrument (DESI) Milky Way Survey (MWS), I research the evolution of the Milky Way through the many satellite galaxy accretion events, which dramatically affect the structure of the Milky Way’s disk and the satellite galaxies being accreted. We find different kinematic manifestations of the disk being out of equilibrium and evidence of a tidally induced spiral arm. I also explore tidally stripped satellite galaxies called stellar streams and what they can tell us about dark matter subhalos in the Milky Way.

Undergraduate Researcher November 2019-August 2023
University of Arizona

Advisor: Dennis Zaritsky

I developed analysis software to identify nucleated low surface brightness galaxies and measure the properties of the nuclear sources. The goal was to measure the incidence of nuclear clusters in these galaxies and to uncover any galaxy properties that led to an increased incidence rate. The properties of the nuclear core will also be used to constrain models for the formation and evolution of these cores. I am the first author of a paper submitted to the Astronomical Journal.

Undergraduate Researcher January 2022-May 2023
University of Arizona

Advisor: Chad Bender

I identified potential exoplanet targets using spectroscopy and photometry of nearby stars to characterize them and the exoplanets that are orbiting them. We followed up on TESS objects with ground-based high-resolution spectroscopy from HPF to measure radial velocities. I learned how to utilize the `PYMC` and `exoplanet` packages from collaborators at Penn State University to model the orbital parameters, mass, and radius of targets of interest. I specifically worked on characterizing a system, labeled TOI-5375, and concluded the companion is a very low-mass star at the hydrogen-burning limit. I am the first author of a paper on the TOI-5375 system published in the Astronomical Journal.

TEACHING EXPERIENCE

Teaching Assistant Spring 2026

Intro to Astronomical Research (ASTR9)

University of California–Santa Cruz

- Attend class lectures and engage with students during in-class discussion.

- Organize ten mentor groups' meeting date and location.

Teaching Assistant

Winter 2024

Overview of the Universe (ASTR2)

University of California–Santa Cruz

- Lead discussion sections of 15-20 students each by creating lectures, worksheets, and interactive learning activities each week.
- Work with the instructor to grade weekly homework assignments, and plan the following week's lesson plan.

Preceptor

Fall 2021, Spring 2022

Introductory Mechanics (PHYS141)

University of Arizona

- Lead discussion sections of over 30 students for the physics introductory mechanics classes along with graduate students by encouraging students to work in groups to solve the weekly packet.
- Address questions that students have in a way that will guide them to the correct answer rather than simply giving the answer.
- Meet weekly with the professor lecturing the course to go over the packet and comment on how the previous meeting went as well as discuss the future worksheet.

Mentor Experience

RESEARCH

ASTR9 mentor

2026

- Created and led a research project to characterize and identify stellar stream members around the globular cluster M92 with five first-year undergraduates.
- Organized weekly meetings with students for progress updates, and a mini lecture on an astronomical concept related to the tasks I assigned for that week.
- Created jupyter notebooks to scaffold learning python skills.
- Teach science communication skills for an academic talk and poster presentation.

PROFESSIONAL DEVELOPMENT

TIMESTEP Alumni Panel - invited speaker

2024, 2025

GradPath graduate school application mentor (WiSE at UCSC)

Alison Weber - Graduating Senior → UC, San Diego

2025

Abigail Baddeley - Graduating Senior

2025

Tyler Barton - Graduating Senior → UC, San Diego

2024

Hayden Campbell - Graduating Senior

2024

Lily Larkins - Graduating Senior → Florida Tech PhD student

2024

UCSC Astro Grad Mentoring Program

Jenna Karcheski

2025

OUTREACH & SERVICE

Astronomy Department *Galaxy Grads Topic Group Lead (UCSC)* 2025-2026

- Lead monthly discussions about ongoing graduate student research where students can give research updates or ask the group for research advice.

Astronomy Department *Science communication workshop organizer (UCSC)* 2025-2026

- Co-lead an eight-part workshop designed for astronomy graduate students and postdocs to build their science communication skills geared toward conference talks and public talks.
- Organized two guest speaker sessions to give advice on how to effectively communicate science and the tools they find most helpful.

Astronomy Department *Head Grad (UCSC)* 2025-2026

- Lead and organize monthly all-grads meetings to discuss upcoming events and departmental concerns that students have.
- Organized an AI town hall for graduate students and code of conduct.
- Created a climate survey to survey the satisfaction of the program for graduate students.
- Organized with a team of four graduate students the ninth annual Mandel Lecture and created advertisement material (poster, social media post, website banner).

Astronomy Department *DEI Committee Graduate Student Representative (UCSC)* 2024-2026

- Lead monthly meetings between the graduate student, post-doc, and faculty representatives.
- Lead the creation of the department's discretionary statement on equity and accessibility in astronomy.
- Create and organize several professional development workshops including a two-part post-doc application workshops, and an academic advising committee discussion.
- Organize events for the first week of the academic year to welcome new students and researchers.
- Organize a pool of funding to support ECS to attend identity-based conferences like NSBP/NHSP joint conference in Nov 2025.

Graduate School Application Resources Website 2024

- Created a website to share my personal advice about applying to astronomy PhD programs in the U.S. and the NSF GRFP.

The University of Arizona Astronomy Club

President Spring 2022-Fall 2022

Vice President Fall 2021-Spring 2022

- Run the weekly meetings with over 100 active members to provide resources for undergraduates, updates on future volunteer outreach events, and announce internal events such as off-campus observation nights, and the annual out-of-state spring trip.

- Coordinate with the other officers to organize outreach events, telescope training events, and bi-annual trips to local dark sky locations, manage our budget, and increase our departmental funding from \$100 to \$600 annually.
- Communicate with the University's student government association as the liaison between the club and the University.

TIMESTEP Undergraduate Leader

Fall 2021-Spring 2022

University of Arizona

- Led a meeting focused on navigating the first two years of people's undergraduate careers.
- Facilitate a positive community that values diversity through attending discussions and DEI workshops.

Phi Sigma Rho DEI committee member

Spring 2021-Present

University of Arizona

- Create a newsletter for the 60 members to promote inclusivity in our sorority including resources for further education.

Astronomy Camp Camp Counselor

Summer 2021

University of Arizona

- Teach 20 to 30 students how to use image processing software, AstroImageJ, to analyze data taken from telescopes at Mt. Bigelow.
- Lead breakout room discussions about different topics in astronomy including galaxy classification and stellar evolution.

OTHER COMMUNITY INVOLVEMENT

Graduate student retreat organizer (UCSC)

2024-2025

Astro Grad Mentoring Program coordinator (UCSC)

2024-2025

Women in STEM mentorship program (UArizona)

Fall 2019–Spring 2020

UArizona vaccination Point of Distribution (POD) volunteer

Feb 2021–May 2021

Arizona Public Interest Research Group (PIRG) voter registration volunteer

Fall 2020