CURRICULUM VITAE

Mika Lambert

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EDUCATION

PhD in Astronomy and Astrophysics Expected 2028
University of California, Santa Cruz

Bachelor of Science in Astronomy May 12 2023
Minors in Physics, Math, and Japanese
University of Arizona
Cumulative GPA: 3.96
Major GPA: 3.93

PUBLICATIONS AND RESEARCH PRODUCTS

Mika Lambert, Donghyeon J. Khim, Dennis Zaritsky, Richard Donnerstein. *Systematically Measuring Ultra-Diffuse Galaxies (SMUDGes). VI. Nuclear Star Clusters*
Submitted to the Astrophysical Journal on August 6, 2023

Mika Lambert, Chad F. Bender, Shubham Kanodia, Caleb I. Canas, Andrew Munson, et. al. *TOI-5375: An Object at the Hydrogen Burning Limit Orbiting an Early M-type Star*
Published to the Astronomical Journal on April 28, 2023

American Astronomical Society 241st meeting: *The Prevalence of Nuclear Star Clusters in Ultra-Diffuse Galaxies*
iposter session, January 12, 2023

RESEARCH EXPERIENCE

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.

SCHOLARSHIPS, AWARDS, AND GRANTS

Wildcat Distinction Tuition Scholarship ($15,000) Fall 2019-Spring 2023
University of Arizona
Galileo Circle Scholar ($1000) 2022
College of Science, nominated by Steward Observatory and awarded to 100 undergraduates within the College of Science.
William Scott and Elizabeth P. Jenkins Scholarship ($1200) 2022
This scholarship's focus is on sharing the wonders of the Universe with the public.
Angelos C. Langadas Astronomy Scholarship ($1233) 2022
This scholarship was one of three awarded based on your strong commitment to pursuing a career in Astronomy.
Glenn C. Purviance Scholarship ($2000) 2022
This Scholarship was awarded as one of three outstanding Juniors in Astronomy.
Bychinsky A. Elaine Astronomy Scholarship ($1,000) 2020, 2021
This scholarship is to support and fund women in astronomy.
The Art of Planetary Science gallery artist 2021, 2022
Lunar and Planetary Laboratory.

COMPUTER SKILLS

Python, Linux, LaTeX, and HTML

OUTREACH & SERVICE

President Spring 2022-Fall 2022
Vice President Fall 2021-Spring 2022
The University of Arizona Astronomy Club
University of Arizona
-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.

Preceptor Fall 2021, Spring 2022
Introductory Mechanics
University of Arizona
-Lead discussion sections of over 30 students for the physics introductory mechanics classes (PHYS141) 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.

Undergraduate Leader Fall 2021-Spring 2022
TIMESTEP
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.

DEI committee member Spring 2021-Present
Phi Sigma Rho
University of Arizona
-Create a newsletter for the 60 members to promote inclusivity in our sorority including resources for further education.

Camp Counselor Summer 2021
Astronomy Camp
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

Women in STEM mentorship program Fall 2019–Spring 2020
U of A vaccination Point of Distribution (POD) volunteer Feb 2021–May 2021
Arizona Public Interest Research Group (PIRG) voter registration volunteer Fall 2020