

Alejandro Jorge Olvera

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EDUCATION	Arizona State University , Tempe, Arizona, USA	
	▪ Doctorate in Astrophysics • Cumulative GPA: 3.94 / 4.00	Aug 2021 – May 2027
	University of California, Berkeley , Berkeley, California, USA	
	▪ B.A. in Astrophysics • Cumulative GPA: 3.33 / 4.00 • Major GPA: 3.77 / 4.00	Aug 2017 – May 2021
RESEARCH INTERESTS	Topics of Interest ▪ <i>Galaxy Evolution & Formation</i> : chemical abundance gradients in local universe galaxies; relationships between the physical characteristics of galaxies; inside-out growth of galaxies	
RESEARCH EXPERIENCE	School of Earth and Space Exploration , Arizona State University	
	▪ Graduate Researcher, Advisor: Sanchayeeta Borthakur • Studying the chemical abundance radial gradient in the galaxy NGC 99 as well as how the abundance relates to the stellar mass, star-formation rate, etc. using imaging and optical spectra of HII regions.	Aug 2021 – Present
	▪ Graduate Researcher, Advisor: Darryl Reano • Qualitatively studying how a self-made inclusively-designed planetarium show shifts attitudes towards science under the Personal Attitudes Toward Science theoretical framework	Jan 2022 – Dec 2023
PUBLICATIONS	Lead Author 1) DIISC-IV: DIISCOVERY of Anomalously Low Metallicity H II Regions in NGC 99 Indirect Evidence of Gas Inflows Olvera, A. J., Borthakur, S., Padave, M., Heckman, T., Gim, H. B., Koplitiz, K., Dupuis, C., [ADS]	
FELLOWSHIPS & AWARDS	SESE Summer Exploration Graduate (SEG) Award ASU The College Leadership Award National Science Foundation (NSF) Graduate Research Fellowship Graduate and Professional Student Association Travel Grant ASU Presidential Graduate Assistantship Graduate and Professional Student Association Travel Grant	Spring 2025 Fall 2024 Spring 2023 Fall 2022 Fall 2021 Fall 2021
CONFERENCES & TALKS	Lunch Talk , National Radio Astronomy Observatory, Socorro, NM ▪ <i>"Breaking the Gradient: Chemical Kinematic Transitions in the XUV Disk of NGC 3344"</i> Conference Poster , SACNAS, Phoenix, AZ ▪ <i>"Indirect Evidence of Gas Inflows in NGC 99"</i> Contributed Talk , GALCROSS, Brno, Czech Republic ▪ <i>"Exploring Metallicity and Gas Flows in NGC 99 through Multi-Wavelength Spectroscopy"</i> Invited Talk , Rongmon Bordoloi's group at NC State, Virtual ▪ <i>"Exploring Metallicity and Gas Flows in NGC 99"</i> Contributed Talk , Stellar Feedback in the ISM, Ensenada, Baja California, México ▪ <i>"Evidence for Inflow and Outflow in NGC 99"</i> Conference Poster & Lightning Talk , Oases in the Cosmic Desert, Tempe, AZ ▪ <i>"Indirect Evidence of Low Metallicity Gas Accretion from the CGM of NGC 99"</i> Contributed Talk , 241st American Astronomical Society Meeting, Seattle, WA ▪ <i>"Investigating the Metallicity Distribution in NGC 99"</i> Contributed Talk , American Geophysical Union Fall 2022 Meeting, Chicago, IL ▪ <i>"Measuring Shifts in Personal Attitudes Toward Science After Participating in an Inclusively-designed Planetarium Show"</i> Lunch Talk , National Radio Astronomy Observatory, Socorro, NM	04/30/2025 10/31/2024 09/17/2024 09/11/2024 12/11/2023 02/23/2023 01/11/2023 12/15/2022

	<ul style="list-style-type: none"> ▪ "Investigating the Metallicity Distribution and Star-Formation in NGC 99" 10/26/2022
	Public Talk , Marston Exploration Theater Virtual Night Sky Event, ASU
	<ul style="list-style-type: none"> ▪ "The Orion Nebula and Star-forming regions" 03/23/2022
OBSERVING EXPERIENCE	Steward Observatory <ul style="list-style-type: none"> ▪ MMT 6.5m Telescope, Binospec Instrument, Mount Hopkins, AZ <ul style="list-style-type: none"> • Total of 10.5 nights of queue observing in 2023A, 2024A, and 2025A as the Principle Investigator. ▪ BOK 90" Telescope, Kitt Peak National Observatory, AZ – <i>Certified Observer</i> <ul style="list-style-type: none"> • Total 10 nights of observing in 2022A, 2023A, and 2024A with B&C Spectrograph as a PI and Co-I.
TRAINING	ALMA Cycle 11 Workshop , Tempe, AZ Mar 2024 VLA Data Reduction Workshop , Socorro, NM Oct 2022 19th Synthesis Imaging Workshop , Virtual May 2022 CITI Training <ul style="list-style-type: none"> ▪ Human Research - IRB – Social & Behavioral Research (<i>Certified</i>) Mar 2022
LEADERSHIP, SERVICE, & OUTREACH	Planetarium Content Creator and Presenter Marston Exploration Theater, School of Earth and Space Exploration, ASU Nov 2023 – Present Graduate Council , School of Earth and Space Exploration, ASU <ul style="list-style-type: none"> ▪ President Sep 2023 – Sep 2024 ▪ Diversity & Inclusion Graduate Student Advocate Sep 2022 – Sep 2023 Organizer of QT Coffee , ASU Dec 2022 – Present <ul style="list-style-type: none"> ▪ Founder of a monthly coffee hour for LGBTQ+ graduate students in the School of Earth and Space Exploration Member of REU Hiring Committee for STARsLab , ASU Aug 2023 AGQ Member Jan 2023 – Jun 2024 <ul style="list-style-type: none"> ▪ Year-round Event Coordinator for the LGBTQ+ affinity group of the American Geophysical Union titled AGQ Phoenix Fan Fusion , Phoenix, AZ <ul style="list-style-type: none"> ▪ Panelist - <i>But can it take selfies?: How to photograph a Black Hole</i> May 2024 ▪ Panelist - <i>Heir to the Empire: The science of Ahsoka</i> May 2024 ▪ Panelist - <i>Falling For You: the Science of Gravity and Gravitational Waves</i> Jun 2023 ▪ Panelist - "...or I can bring you in cold." <i>Science in The Mandalorian</i> Jun 2023
MENTORSHIP	Graduate Student Mentor to Embark Fellows <ul style="list-style-type: none"> ▪ Mentored undergraduate students on making a conference poster Aug 2024 - Oct 2024 Research Mentor to Undergraduate Student <ul style="list-style-type: none"> ▪ Sara Holeman Jan 2023 - Present <ul style="list-style-type: none"> • Project on studying galaxy Rotation Curves using Hα emission line.
CLASSES	School of Earth and Space Exploration , Arizona State University <ul style="list-style-type: none"> ▪ AST 532 Galaxies & Cosmology II: Galaxy Evolution Fall 2024 ▪ SES 598 Cosmic Ecosystems ▪ AST 591 Seminar Fall 2023 ▪ AST 522 Stars/ISM II: Stellar Evolution Spring 2023 ▪ AST 521 Stars/ISM I: Radiative Transfer Fall 2022 ▪ AST 523 Stars/ISM III: Interstellar Medium Spring 2022 ▪ AST 531 Galaxies & Cosmology I: Galaxies Fall 2021 ▪ SES 501 SESE Colloquium ▪ SES 502 Exploring SESE Research
TEACHING	Teaching Assistant , Arizona State University <ul style="list-style-type: none"> ▪ AST 301: Physics of Astrophysics Aug 2022 – Dec 2022

