

# Faezeh Manesh

Department of Physics and Astronomy, University of California, Riverside

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## Research Interests

**Observational Galaxy Formation and Evolution:** massive galaxies, quenching of star formation, stellar mass assembly, spatially-resolved stellar populations, first galaxies

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## Education

2023 – 2028	<b>Ph.D. in Astronomy, University of California, Riverside</b>	<i>Riverside, CA</i>
2025	<b>M.Sc. in Astronomy, University of California, Riverside</b>	<i>Riverside, CA</i>
2022	<b>B.Sc. in Physics, Shiraz University</b>	<i>Shiraz, Iran</i>

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## Positions

2023 – Present	<b>Graduate Research Assistant, University of California, Riverside</b>	<i>Riverside, CA</i>
2022 – 2023	<b>Undergraduate Research Assistant, Institute for Research in Fundamental Sciences (IPM)</b>	<i>Tehran, Iran</i>
2018 – 2022	<b>Undergraduate Research Assistant, Biruni Observatory, Shiraz University</b>	<i>Shiraz, Iran</i>

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## Publications

2026	<b>Unveiling Fast-Forming Galaxies at Cosmic Dawn</b> Manesh, F., Weaver, J., Siana, B., ..., et al. <i>In preparation</i>
2026	<b>The Fraction of Clumpy Galaxies in JWST Surveys over <math>2 &lt; z &lt; 12</math></b> De la Vega, A., ..., Manesh, F., et al.
2023	<b>COSMOS2020: Disentangling the Role of Mass and Environment in Star Formation Activity of Galaxies at <math>0.4 &lt; z &lt; 4</math></b> Taamoli, S., ..., Manesh, F., et al.

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## Research Projects

### PhD Research

2026 – Present	<b>Characterizing Bursty Star Formation Histories of Dwarf Galaxies at <math>z = 1–2.4</math> in the Abell 2744 Lensing Field</b> JWST Cycle 3 AR Proposal 6319 · PI: Dr. Anahita Alavi
2023 – Present	<b>Star Formation Histories and Spatially Resolved Properties of Ultraluminous <math>z &gt; 7</math> Galaxies</b> JWST Cycle 1 GO2659 project · PI: Dr. John R. Weaver

### Undergraduate Research

2022 – 2023	<b>Star Formation History in a Dwarf Galaxy, NGC 6822</b> Supervisor: Dr. Atefeh Javadi · Institute for Research in Fundamental Sciences (IPM)
2021 – 2022	<b>Observation of Transiting Exoplanets: Transit Light Curves of the Hot Jupiter HAT-P-32b</b> Supervisor: Dr. Moein Mosleh · Shiraz University

## Talks & Posters

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- Jun. 2026      **POSTER**  
**Massive galaxy growth in action: A major merger at  $z = 7.7$**       *Pasadena, CA*  
248th of the American Astronomical Society
- Mar. 2026      **POSTER**  
**Massive galaxy growth in action: A major merger at  $z = 7.7$**       *Aspen, CO*  
Aspen meeting
- Oct. 2025      **CONFERENCE TALK**  
**Unveiling Fast-Forming Galaxies at Cosmic Dawn**      *Pasadena, CA*  
Infrared Spectroscopy from Space, IPAC
- Aug. 2025      **POSTER**  
**Unveiling Fast-Forming Galaxies at Cosmic Dawn**      *Santa Cruz, CA*  
Santa Cruz Galaxy Workshop
- Jan. 2025      **CONFERENCE TALK**  
**Unveiling Fast-Forming Galaxies at Cosmic Dawn**      *National Harbor, MD*  
245th Meeting of the American Astronomical Society
- Jan. 2023      **SEMINAR**  
**Observation of Transiting Exoplanet with Small Telescopes**      *IPM, Tehran*  
Institute for Research in Fundamental Sciences

## Awards & Honors

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- 2026      **Martin and Beate Block Award**  
Aspen Center for Physics
- 2023      **Dean's Distinguished Fellowship**  
University of California, Riverside
- 2022      **Ranked 6<sup>th</sup> among 30 Physics Students**  
Shiraz University
- 2017      **Tuition-Waiver Scholarship**  
Shiraz University

### Travel Awards

- 2026      **UCR Graduate Student Association \$600 Conference Travel Grant**  
University of California, Riverside

## Observing Experience

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- Spring 2025      **Lick Observatory Workshop**  
Observational training using the Shane (3m) and Nickel (1m) telescopes through the UCO Observational Astronomy Workshop
- Fall 2021      **Transit Photometry of HAT-P-32b**  
Biruni Observatory 20-inch telescope · 2 nights

## Teaching Experience

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- 2023 – 2028      **Teaching Assistant, University of California, Riverside**  
Laboratory of General Physics — Spring 2024, Fall 2024, Winter 2025
- 2018 – 2022      **Teaching Assistant, Shiraz University**  
General Physics 111 — Spring 2021  
Introduction to Astronomy and Astrophysics — Fall 2018, Fall 2021, Fall 2022  
Prepared homework problems, graded assignments, and taught discussion sections.

## Skills

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### Data Analysis

**Photometry** Aperture & PSF photometry (SourceExtractor, Photutils), SED fitting (EAZY, Bagpipes, Prospector)

**Spectroscopy** Integral field spectroscopy, grism spectroscopy; emission-line measurements, stellar population modeling

**Morphology** Surface-brightness profile fitting (GALFIT, PySersic)

### Computing

**Languages** Python (NumPy, SciPy, Astropy, Matplotlib), HTML, CSS

**Tools** Git, Linux/Unix, L<sup>A</sup>T<sub>E</sub>X

## Service & Public Outreach

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2024 – Present **Core Member, AURORA: Astronomy Union for Reading, Outreach, and Research Activities**

Actively involved in organizing events and activities to foster a vibrant and engaging environment for graduate students in astronomy at UCR.

2024 – Present **Co-manager & Author, Staryab Website**

Write monthly literature summaries, edit contributions, and coordinate communication among Iranian professional astronomers worldwide for a Farsi-language astrophysics platform.

2023 – Present **Stargazing Outreach Volunteer, University of California, Riverside**

Guide public telescope viewing and share astronomy concepts with students, children, and the local community.

2020 – 2021 **Astronomy Society President, Shiraz University**

2018 – 2022 **Stargazing Outreach Volunteer & Core Member, Biruni Observatory, Shiraz University**

Core member responsible for managing public events and outreach programs at the observatory.

2018 – 2020 **Public Lecturer, Biruni Observatory, Shiraz University, Iran**

Gave introductory talks on astronomy and night-sky observing to general audiences at the observatory.

## Diversity, Equity, & Inclusion

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2026 **Participant, Chancellor's Making Excellence Inclusive (MEI) Diversity Certificate Program, University of California, Riverside**

Completed a multi-week certificate program on diversity, equity, and inclusion through workshops and discussion sessions; authored a white paper and designed and presented a capstone project applying DEI concepts to the university environment.

2025 – 2026 **President, Physics Organization for Women and Underrepresented at UCR (POWUR)**

Lead an organization dedicated to supporting and advocating for women and underrepresented students in the Department of Physics and Astronomy; organize community-building, mentoring, and professional-development events.

## Languages

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Farsi (Native) English (Fluent)

## Hobbies

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Night sky photography, pottery, knitting, and random arts & crafts