REFA AL-AMRI

Astronomy Graduate Student at Texas A&M Univserity

alamri.carrd.co

refaalamri@tamu.edu
github.com/refaalamri

509 339 4193 **T**exas, USA

in /in/refaalamri

RESEARCH INTERESTS

Black holes, galaxy growth and evolution, black hole-host galaxy co-evolution, active galactic nuclei, dark matter.

PROGRAMMING LANGUAGES

fluent: Python, T_FX, Matlab.

experience with: IDL, R.

ACADEMIC AND PROFESSIONAL APPOINTMENTS

Fall 2022 - Graduate Research Assistant

Texas A&M University

present Department of Physics and Astronomy

Fall 2022 - Graduate Teaching Assistant

Texas A&M University

Spring 2024 Department of Physics and Astronomy

Fall 2021 - Undergraduate Teaching Assistant

Washington State University

Spring 2022 Department of Mathematics and Statistics

Fall 2019 **Peer Mentor**Voiland College of Engineering and Architecture

Washington State University

EDUCATION

2022 - present **Ph.D. Astronomy**

Texas A&M University

Department of Physics and Astronomy

2022 - present M.S. Astronomy

Texas A&M University

Department of Physics and Astronomy

2019 - 2022 B.S. Physics and Astronomy | Mathematics minor

Washington State University

Department of Physics and Astronomy

RESEARCH EXPERIENCE/ PROJECTS -

Research A JWST View of the Central Stellar and Gas Kinematics of M87

Measuring the stellar and gas kinematics in the giant elliptical galaxy, M87, using JWST NIR-Spec IFU data to obtain the most robust stellar dynamical black hole mass measurement to

date.

Project Modules for Experiments in Stellar Astrophysics (MESA) Exploration

Using MESA To study how rotation rate and convection mixing lengths influence the the stel-

lar evolution of different mass stars.

Research Determining the Population of Blue Straggler Stars in Open Clusters

Finding blue straggler stars that are twice as massive as the main-sequence turn-off star of

clusters using the GAIA database.

Project Exploring the Effects of Volume on Reverberation Time

Explored the effect of volume on the reverberation time using different simulated rooms

while keeping the absorption coefficient and sound source constant.

OBSERVING/GENERAL EXPERIENCE

December 2024 W. M. Keck Observatory - OSIRIS

 $2\,1/2$ night

2024B

July 2024 W. M. Keck Observatory - OSIRIS

2024A

1/2 night

Feburary 2024	W. M. Keck Observatory - OSIRIS 2024A	1/2 night	
December 2023	W. M. Keck Observatory - OSIRIS 2023B	2 1/2 nights	
July 2023	W. M. Keck Observatory - OSIRIS 2023A	2 1/2 nights	
TEACHING EXPERIENCE			
Fall 2022 - Spring 2023	Astronomy 101: Basic Astronomy Department of Physics and Astronomy	Texas A&M University	
Fall 2022 - Fall 2023	Astronomy 103: Introduction to Stars and Exoplanets Department of Physics and Astronomy	Texas A&M University	
Fall 2022 - Fall 2023	Astronomy 104: Introduction to Galaxies and Cosmology Department of Physics and Astronomy	Texas A&M University	
Fall 2022 - Spring 2023	Astronomy 314: Survey of Astronomy Department of Physics and Astronomy	Texas A&M University	
Fall 2022	Astronomy 401: Stars and Extrasolar Planets Department of Physics and Astronomy	Texas A&M University	
Spring 2024	Astronomy 420: Advanced Astrophysical Research Methods Department of Physics and Astronomy	Texas A&M University	
Fall 2021 - Spring 2022	Math 315: Differential Equations Department of Mathematics and Statistics	Washington State University	
HONORS AND AWARDS			
2022	Department Fellowship Department of Physics and Astronomy	Texas A&M University	
2021	Paul A. Anderson Award for Excellence Department of Physics and Astronomy	Washington State University	
2019-2022	President's Honor Roll Department of Physics and Astronomy	Washington State University	
2019-2021	Physics Textbook Award Department of Physics and Astronomy	Washington State University	
2019	Boeing Peer Mentor Scholarship Voiland College of Engineering and Architecture	Washington State University	
CONFERENCES, T	ALKS AND PRESENTATIONS —		
2024	Texas A&M Extragalactic Seminar Talk	Texas A&M University	
2024	Astronomy on Tap Talk	Public Outreach Event	
2024	Astrosymposium Talk	Texas A&M University	
2023	Astronomy Bash Symposium: New Horizons in Astronomy Poster	University of Texas at Austin	

2023	Astrosymposium Virtual Talk	Texas A&M University
2022	Astrosymposium Talk	Texas A&M University
2019	Physics and Astronomy Undergraduate Thesis Poster Session Poster	Washington State University