

CURRICULUM VITAE

RYAN P KEENAN

CONTACT INFORMATION

Steward Observatory
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EDUCATION

2017-Present UNIVERSITY OF ARIZONA
Ph.D., Astronomy and Astrophysics
Advisor: Dan Marrone
M.S., Astronomy and Astrophysics (2020)

2013-2017 UNIVERSITY OF MICHIGAN
B.S., Applied Mathematics, Astronomy and Astrophysics, Physics (2017)
Advisor: Sally Oey — Thesis: Lyman Continuum Escape From Haro 11

FELLOWSHIPS, AWARDS, AND HONORS

2019-Present National Science Foundation Graduate Research Fellowship

2017 University of Michigan Departmental Award for Best Senior Thesis in Astronomy

2013-2017 Stamps Leadership Scholar

2014-2017 College Honors, University of Michigan

2016 Honors Travel Grant for thesis-related work

2016 Sigma Pi Sigma Honors Society Inductee

2013 Energy Solutions Scholarship Recipient

OUTREACH AND SERVICE

2014-Present Research/Writing Coach at Stegner Young Writing Scholar's Institute

2018-Present Coordinator for Mentorship and Education in SCience for Tucson (MESCIT)

2020-Present Graduate Student Representative, Steward Observatory Diversity, Equity and Inclusion Initiative
Task Force on Mentorship

2020 Coordinator for Tucson Initiative for Minority Engagement in Science and TEchnology Program (TIMESTEP) Summer Internship

TELESCOPE TIME OBTAINED AS PRIMARY INVESTIGATOR

ARO SMT/20B "Continuing the Arizona Molecular ISM Survey with the SMT"
Awarded Time: 250 hours

ARO-SMT/20A "Arizona Molecular ISM Survey with the SMT (AMISS)"
Awarded Time: 255 hours

MMT/20A "Star formation in the largest molecular gas reservoirs at $z \sim 2$ "
Awarded time: 1.5 nights

Bok 2m/20A "A measurement of molecular gas in normal star forming galaxies during the peak of cosmic star formation"
Awarded time: 4 nights, program not observed due to COVID-19

ARO 12m/19B "Survey of CO Emitters During the Epoch of Peak Star Formation"

PUBLICATIONS

First Author Publications

2. “Biases and Cosmic Variance in Molecular Gas Abundance Measurements at High Redshift”, **R. P. Keenan**, D. P. Marrone, & G. K. Keating 2020, *The Astrophysical Journal*, accepted
1. “Haro 11: Where is the Lyman Continuum Source?”, **R. P. Keenan**, M. S. Oey, A. E. Jaskot, & B. L. James 2017, *The Astrophysical Journal*, 848, 12

Collaborator Authored Publications

2. “An Intensity Mapping Detection of Aggregate CO Line Emission at 3 mm”, G. K. Keating, D. P. Marrone, G. C. Bower, & **R. P. Keenan** 2020, *The Astrophysical Journal*, in press
1. “Mapping Lyman Continuum Escape in Tololo 1247-232”, G. Micheva, M. S. Oey, **R. P. Keenan**, A. E. Jaskot, & B. L. James 2018, *The Astrophysical Journal*, 867, 1

TALKS AND POSTERS

Research Talks and Posters

4. NOIRLab Friday Lunch Astronomy Seminar Hour, Tucson, Arizona, USA, October 2020: “Quantifying Effects of Cosmic Variance and Measurement Bias on our Understanding of the Cosmic Abundance of Molecular Gas” (talk)
3. Lines in the Large Scale Structure, Marseille, France, July 2019: “Simulating Future Intensity Mapping Fields” (talk)
2. University of Michigan Undergraduate Poster Session, Ann Arbor, Michigan, USA, April 2017: “Haro 11: Where is the Lyman Continuum Source?” (poster)
1. 229th Meeting of the American Astronomical Society, Grapevine, Texas, USA, January 2017: “Haro 11: Where is the Lyman Continuum Source?” (poster)

Outreach-Related Talks

2. Tucson Area Physics Teachers Breakfast, Tucson, Arizona, USA, October 2020: “Mentorship and Education in SCience for Tucson” (talk, given with I. Shivaie and E. Schlawin)
1. NOAO Friday Lunch Astronomy Seminar Hour, Tucson, Arizona, USA, December 2019: “Mentorship and Education in SCience for Tucson” (talk, given with I. Shivaie and E. Schlawin)

TEACHING

2020 Fall University of Arizona, ASTR300A Dynamics in Astrophysics, Teaching Assistant
2017 Spring University of Michigan, ASTRO 104 Alien Skies: A Tour Through the Universe, Grader
2016 Fall University of Michigan, PHYSICS 453 Quantum Mechanics, Grader
2015 Fall, 2016 Spring University of Michigan, PHYSICS 140 General Physics I, Learning Assistant