

Anishya Harshan

Graduate Student, Astronomy

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EDUCATION

Doctor of Philosophy, Astronomy Feb, 2018-Present
University of New South Wales
Supervisor: Dr. Kim-Vy Tran and Dr. Anshu Gupta

Dual Bachelor of Science - Master of Science in Physics May, 2017
Indian Institute of Science Education and Research-Mohali, India
Supervisor: Dr. H K Jassal

OBSERVING EXPERIENCE

W.M. Keck Observatory - MOSFIRE
Very Large Telescope, Paranal Observatory - KMOS

I am experienced in data reduction of multi-object spectrographs: MOSFIRE and KMOS. I am also familiar with cosmological hydrodynamical simulation IllustrisTNG and data reduction of the HST.

GRANTS, AWARDS AND SCHOLARSHIPS

Scientia Career Development Grant 2018-2022
University of New South Wales AUD 40,000

Best Poster Award
UNSW Science Postgraduate Research Showcase
Best 1-Minute Thesis Award, School of Physics
UNSW Science Postgraduate Research Showcase
UNSW Women in Maths and Science Champions Program

Scientia PhD Scholarship 2018-present
University of New South Wales
INSPIRE Scholarship, for higher education in natural sciences. 2012-2017
Department of Science and Technology, Govt. of India
Visiting Students Research Program Scholarship May-June 2016
National Centre for Radio Astrophysics, India
Visiting Students Research Program Scholarship May-June 2015
Institute of Mathematical Sciences, India

PROFESSIONAL SOCIETIES

ASTRO3D, Student Member

Australian Research Council- Centre of Excellence

Astronomical Society of Australia, Student Member

PUBLICATIONS

1. **Harshan, A.**, Gupta, A., Tran, K.-V. H., Alcorn, L. Y., Yuan, T., Kacprzak, G. G., Nanayakkara, T., Glazebrook, K., Kewley, L., Labb'e, I., Papovich, C. *The Astrophysical Journal*, 892, 2, *ZFIRE: Measuring electron density with [OII] as a function of environment at $z = 1.62$*

2. Gupta, A., Tran, K.-V. H., Cohn, J., Alcorn, L. Y., Yuan, T., Rodriguez-Gomez, V., **Harshan, A.**, Kewley, L., Forrest, B., Glazebrook, K., Straatman, C. M., Kacprzak, G. G., Nanayakkara, T., Labb'e, I., Papovich, C., Cowley, M., *The Astrophysical Journal*, 893, 1, *MOSEL survey: Growth of massive galaxies transitions from in situ to ex situ at $z < 3$* .

3. Alcorn, L. Y., Gupta, A., Tran, K.-V. H., Cohn, J., Forrest, B., Glazebrook, K., **Harshan, A.**, Kacprzak, G. G., Kewley, L., Labb'e, I., Nanayakkara, T., Papovich, C., Spitler, L. R., Straatman, C. M., 2019, submitted, *A Tale of Two Clusters: An analysis of gas-phase metallicity and nebular gas conditions in proto-clusters galaxies at $z \sim 2$*

TALKS

CONFERENCE TALKS

1. Star Formation Histories with PROSPECTOR in Proto-cluster at $z \sim 2$, The build-up of galaxies through multiple tracers and facilities, Perth, Australia, February 2020

2. Environmental Effects on Electron density at $z \sim 1.6$, ASTRO3D science meeting, Sydney, Australia, May 2019

3. Environmental Effects on Electron density at $z \sim 1.6$, Linking galaxies from the Epoch of initial star-formation to today, Sydney, Australia, February 2019

POSTERS

1. Environmental Effects on Electron density at $z \sim 1.6$, Astronomy Society of Australia (ASA) annual general meeting, Perth, Australia, July 2019

2. Environmental Effects on Electron density at $z \sim 1.6$, Life and death of star-forming galaxies, Perth, Australia, March 2019