
ZHUOQI (WILL) LIU

Department of Astronomy, University of Michigan
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EDUCATION

University of Michigan, Ann Arbor

- Ph.D. Candidate in Astronomy & Astrophysics 2021-
Thesis: Probing the CGM and IGM via Giant Quasar Nebulae
Advisor: Professor Sean D. Johnson

- M.S. in Astronomy & Astrophysics 2021-2023

University of California, Santa Barbara

- B.S. in Physics, with Highest Honors 2017-2021
Thesis: Variability Study of High-redshift Quasars and Stars in unWISE
Advisor: Professor Joseph F. Hennawi

RESEARCH INTERESTS: OBSERVATIONS OF GALAXY EVOLUTION

- The inter- and circum-galactic medium and relationship to galaxy evolution
- Fueling of and feedback from star-formation in galaxies
- Feeding of and feedback from quasars

JOURNAL ARTICLES

5. Johnson, S. D., **Liu, Z.**, Li J. I.-H., Schaye, J., Greene, J. E., Cantalupo, S., Rudie, G. C., Qu, Z., Chen, H.-W., Rafelski, M., Muzahid, S., Chen, M. C., Contini, T., Kollatschny, W., Mishra, N., Petitjean, P., Rauch, M., Zahedy, F. Z., in review with ApJ, *Discovery of optically emitting circumgalactic nebulae around the majority of UV-luminous quasars at intermediate redshift*
4. Li J. I.-H., Johnson, S. D., Boettcher, E., Cantalupo, S., Chen, H.-W., Chen, M. C., DePalma, D., **Liu, Z.**, Mishra, N., Petitjean, P., Qu, Z., Rudie, G. C., Schaye, J., Zahedy, F. S., in review with ApJ, *The Cosmic Ultraviolet Baryon Survey (CUBS) VIII: Group Environments of the Most Luminous Quasars at $z \approx 1$*
3. Chen, M. C., Chen, H.-W., Rauch, M., Qu, Z., Johnson, S. D., Schaye, J., Rudie, G. C. ; Li, J. I.-H., **Liu, Z.**, Zahedy, F. S., Cantalupo, S., Boettcher, E., 2024, *An ensemble study of turbulence in extended QSO nebulae at $z \approx 0.5 - 1$* , ApJ, in press
2. **Liu, Z.**, Johnson, S. D., Li J. I.-H., Rudie, G. C., Schaye, J., Chen, H.-W., Brinchmann, J., Cantalupo, S., Chen, M. C., Kollatschny, W., Mishra, N., Muzahid, S., 2024, *The first comprehensive study of a giant nebula around a radio-quiet quasar in the $z < 1$ Universe*, MNRAS, 527, 3, 5429
1. Johnson, S. D., Schaye, J., Walth, G. L., Li J. I.-H., Rudie, G. C., Chen, H.-W., Chen, M. C., Epinat, B., Gaspari, M., Cantalupo, S., Kollatschny, W., **Liu, Z.**, Muzahid, S. 2022, *Directly Tracing Cool Filamentary Accretion over >100 kpc into the Interstellar Medium of a Quasar Host at $z=1$* , ApJ Letters, 940, L40

TEACHING, MENTORING, AND PUBLIC OUTREACH

Teaching Assistant, University of Michigan, Ann Arbor *Jan. 2022 - Dec. 2022*

- Astronomy 101: The Solar System and the Search for a new Earth
- Astronomy 102: Stars, Galaxies, and the Universe

Learning Assistant, University of California, Santa Barbara *Oct. 2020 - Jan. 2021*

- Physics 110B: Introduction to Electrodynamics