Qingzheng Yu

Department of Astronomy
Xiamen University
Xiamen, Fujian, 361005

Email: yuqingzheng@stu.xmu.edu.cn
Website: https://qz-yu.github.io
ORCID: 0000-0003-3230-3981

EDUCATION

Ph.D. in Astrophysics *Sep. 2017 - Jun. 2023*
Department of Astronomy, Xiamen University, Fujian, China
- Advisor: Prof. Taotao Fang

Bachelor of Science in Physics *Sep. 2012 - Jun. 2016*
Department of Physics, Guangzhou University, Guangdong, China

RESEARCH INTERESTS

Galaxy Formation and Evolution, Circumgalactic Medium, Interstellar Medium, Gas Recycling and Star Formation of Galaxies, Galaxy Interactions and Mergers, H I Absorption Survey toward Radio AGNs

ACCEPTED PROPOSALS

PI, 38.4 h, FAST 2023
PT2023_0004, Unveiling the Interaction between the Magellanic Stream and the Milky Way's Circumgalactic Medium

PI, 34 h, FAST 2023
PT2023_0021, Deep Mapping of Diffuse H I Gas in Intragroup Medium of Hickson Compact Groups

PI, 19.7 h, JVLA 2023A
23A-236, Unveiling the Origin of H I Absorbers toward Faint Radio AGNs Discovered by FAST

PI, 56.6 h, FAST 2022
PT2022_0090, A Survey of H I Absorption in Faint Radio AGNs at $z < 0.1$

PI, 39 h, IRAM 30 m 2022A
029-22, Unveiling the cold Gas Evolution of MaNGA Merging Galaxies

PI, 12.6 h, FAST 2021
PT2021_0067, A Pilot Survey of H I Absorption in faint radio AGNs

PI, 17.8 h, IRAM 30 m 2021DDT
E01-21, Unveiling the cold Gas Evolution of MaNGA Merging Galaxies

PI, 21 h, JCMT 2021B
M21BP051, Probing the Cold Gas Evolution of MaNGA Merging Galaxies

PI, 1 night, P200/Hale TAP 2021B
CTAP2021-B0019, Probing the Circumgalactic Medium of Galaxy Mergers with Deep Hα Imaging

PI, 11 h, GBT 2021A
GBT-21A-245, Probing the H I content of Merging Galaxies in MaNGA

PI, 1 night, P200/Hale TAP 2021A
CTAP2021-A0034, Probing the Circumgalactic Medium of Galaxy Mergers with Deep Hα Imaging

PI, 4 h, FAST 2020
PT2020_0152, Probing the H I content of Merging Galaxies in MaNGA

Co-I, 19.4 h, FAST 2022
PT2022_0181, Search for Extragalactic H I Absorption Systems in the Redshift Range of 0.25-0.35

Co-I, 26 h, FAST 2021
PT2021_0040, Unveiling the Interaction between the Magellanic Stream and the Milky Way's Circumgalactic Medium

Co-I, 30 h, FAST 2021
PT2021_0139, Search for Extragalactic H I Absorption Systems in the Redshift Range of 0.25-0.35

Co-I, 2 h, FAST 2021
PT2021_0120, Two Quiescent Close Binary Systems that Contain a Candidate Neutron Star

Co-I, 11 h, FAST 2020
PT2021_0186, Probing the H I Gas Contents of Transitional Galaxies Indicated by the [N II]/[S II] ratios

Co-I, 3 h, FAST 2020
PT2021_0147, Direct Observation of the H I Disk of Massive Spiral Galaxy: A Pilot Study of NGC 891

Co-I, 7 h, FAST Shared risk 2019
2019a-005-S, Connecting the Circumgalactic Medium and the H I content of the redshift ~ 0.2 galaxies: A pilot study

OBSERVING EXPERIENCE

Radio single-dish spectroscopy and mapping:

FAST, H I spectral line observations of nearby galaxies, pool, 94 h
FAST, H I mapping of nearby galaxy groups, pool, 34 h
FAST, H I mapping of high-velocity clouds, pool, 64 h
GBT, H I spectral line observations of nearby galaxies, pool, 11h
IRAM 30m, CO spectral line observations of nearby galaxies, remote, 149 h
JCMT, CO spectral line observations of nearby galaxies, pool, 21 h
Parkes, H I spectral line observations of nearby galaxies, remote, 22 h

Radio interferometer:

JVLA, H I spectral line and continuum imaging of nearby galaxies, pool, 19.7 h

Optical imaging and spectroscopy:

P200/Hale, narrow-band imaging of nearby galaxies with WaSP, remote, 2 nights
P200/Hale, spectroscopic observations of nearby galaxies with DBSP, remote, 1 night

CONFERENCE CONTRIBUTION

H I Absorption in Low-power Radio AGNs Detected by FAST 07/2023
-Contributed talk on "Symposium on Multiwavelength Studies of Quasars and Active Galactic Nuclei", Lijiang, China

Investigating Galaxy Interactions and AGN through H I Observations 06/2023
-Contributed talk on "Sixth Annual SKA Science Symposium", Shanghai, China

On the H I Content of MaNGA Major Merger Pairs 08/2022
-Contributed remote talk on "IAUGA 2022 Symposium 373", Busan, Korea

On the H I Content of MaNGA Major Merger Pairs 12/2021
-Contributed talk on "Jing-Guang-Xia Astrophysics Symposium", Xiamen, China

H I observations of MaNGA merging galaxies and HVCs with FAST 04/2021
-Contributed talk on "CRAFTS and FAST data analysis workshop", Nanjing, China

COMMUNITY SERVICE

Member of the FAST User Committee

SKILLS

Languages: Chinese, English
Programming: Python, IDL, Matlab
Software & Tools: GILDAS, HIFAST, Starlink, MIRIAD, IRAF, GBTIDL

REFERENCES

• Taotao Fang
Email: fangt@xmu.edu.cn
Professor of Astronomy & Astrophysics, Department of Astronomy, Xiamen University

• Cong Kevin Xu
Email: coxu@ipac.caltech.edu
Professor of Astronomy & Astrophysics,
Chinese Academy of Sciences South America Center for Astronomy,
National Astronomical Observatories, Chinese Academy of Sciences

• Junfeng Wang
Email: jfwang@xmu.edu.cn
Professor of Astronomy & Astrophysics, Department of Astronomy, Xiamen University

PUBLICATIONS

• As the first author:

Yu Q., Fang T., Wang J., Wu J., *HI Absorption in Low-power Radio AGNs Detected by FAST*, 2023, ApJ, 952, 144
Yu Q., Fang T., Feng S., Zhang B., Xu C. K., Wang Y., Hao L., *On the HI Content of MaNGA Major Merger Pairs*, 2022, ApJ, 934, 114
Yu Q. et al., *CO Observations of MaNGA Galaxy Pairs*, in preparation.

• As a co-author:

Yi T., +17+ **Yu Q.** +10, *A Dynamically discovered and characterized non-accreting neutron star-M dwarf binary candidate*, 2022, Nature Astronomy, 6, 1203
Zhang B., Zhu M., Wu Z.-Z., **Yu Q.-Z.**, et al., *Extragalactic HI 21-cm absorption line observations with the Five-hundred-meter Aperture Spherical radio Telescope*, 2021, MNRAS, 503, 5385