

# Qingzheng Yu

Department of Astronomy  
Xiamen University  
Xiamen, Fujian, 361005

Email: [yuqingzheng@stu.xmu.edu.cn](mailto: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, 19.7 h, JVL

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 H $\alpha$  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 H $\alpha$  Imaging

### PI, 4 h, FAST

2020

PT2020\_0152, Probing the H I content of Merging Galaxies in MaNGA

<b>Co-I, 19.4 h, FAST</b>	2022
PT2022.0181, Search for Extragalactic H I Absorption Systems in the Redshift Range of 0.25-0.35	
<b>Co-I, 26 h, FAST</b>	2021
PT2021.0040, Unveiling the Interaction between the Magellanic Stream and the Milky Way's Circumgalactic Medium	
<b>Co-I, 30 h, FAST</b>	2021
PT2021.0139, Search for Extragalactic H I Absorption Systems in the Redshift Range of 0.25-0.35	
<b>Co-I, 2 h, FAST</b>	2021
PT2021.0120, Two Quiescent Close Binary Systems that Contain a Candidate Neutron Star	
<b>Co-I, 11 h, FAST</b>	2020
PT2021.0186, Probing the H I Gas Contents of Transitional Galaxies Indicated by the [N II]/[S II] ratios	
<b>Co-I, 3 h, FAST</b>	2020
PT2021.0147, Direct Observation of the H I Disk of Massive Spiral Galaxy: A Pilot Study of NGC 891	
<b>Co-I, 7 h, FAST</b>	Shared risk 2019
2019a-005-S, Connecting the Circumgalactic Medium and the H I content of the redshift $\sim 0.2$ 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 high-velocity clouds, pool, 26 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

### 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

---

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., 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.**, Fang T., Wang J., Wu J., *HI Absorption in Low-power Radio AGNs Detected by FAST*, [accepted to ApJ](#).  
**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