Hui Hong

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Education

University of Science and Technology of China — Hefei, China
M.S. in Astronomy; GPA: 3.81/4.30 — Sep 2021–Current

University of Science and Technology of China — Hefei, China
B.S. in Astronomy — Sep 2015–Jun 2019

- Thesis: "How Galaxy Structure Affects Star Formation"

Publications

1. **Hui Hong**, Huiyuan Wang, H.J. Mo, Enci Wang, *"Central Surface Density versus Velocity Dispersion in Quenching of Satellite Galaxies"*, in preparation for submission to ApJ.
2. Huiling Liu& Yan Lu& **Hui Hong**, Huiyuan Wang, H.J. Mo, Ziwen Zhang, *"Duty Cycle of Radio Galaxies Based on Artificial Intelligence"*, Co-First Author, in preparation for submission to Nature.
3. **Hui Hong**, Huiyuan Wang, H.J. Mo, Ziwen Zhang, Guangwen Chen, Wentao Luo, Tinggui Wang, Pengfei Li, Renjie Li, Yao Yao, Aoxiang Jiang, *"Dynamical Hotness, Star Formation Quenching and Growth of Supermassive Black Holes"*, 2023, ApJ, 954, 183, [arXiv:2305.02910].
4. Ziwen Zhang, Huiyuan Wang, Wentao Luo, H.J. Mo, Zhixiong Liang, Ran Li, Xiaohu Yang, Tinggui Wang, Hongxin Zhang, **Hui Hong**, Xiaoyu Wang, Enci Wang, Pengfei Li, Jingjing Shi, *"Hosts and triggers of AGNs in the Local Universe"*, 2021, A&A, 650, A155, [arXiv:2012.10640].
5. Pengfei Li, Huiyuan Wang, H.J. Mo, Enci Wang, **Hui Hong**, *"Characteristic Mass in Galaxy Quenching: Environmental versus Internal Effects"*, 2020, ApJ, 902, 75, [arXiv:2003.09776].

Research Experience

University of Science and Technology of China — Hefei, China
Advisors: Prof. Huiyuan Wang, Prof. Houjun Mo — Jan 2020-Now

- HI gas properties with ALFALFA, HI-MaNGA, GASS data
- Radio galaxy duty cycle
- Spatially resolved star formation history
- Dynamics, structure and quenching of central and satellite galaxies
- Ionized gas property and its connection with quenching
- Quenching correlation function
- Color difference between satellite and central galaxies

University of Massachusetts Amherst — Amherst, USA
Advisor: Prof Houjun Mo — Aug 2019-Oct 2019

- Radial profiles of galaxies

University of Science and Technology of China — Hefei, China
Advisor: Prof Huiyuan Wang — Dec 2018-Jul 2019

- Star formation activities in galaxy bulges and disks
- Building model to construct star formation rate (SFR) and g-r color distributions of galaxies

Teaching, Advising & Service Experience

- **Teaching Assistant** Fall 2022 & Fall 2023
  Galactic Astronomy (ASTR5002P.01 at University of Science and Technology of China)
- **Co-advisor** May 2023-Now
  Mengkui Zhou (First-year graduate student at USTC)
  Huiling Liu (Ungraduate student at USTC)
- **Organizer** Jan 2023-Now
  Galaxy and Cosmology Seminar

Conference Experience

Resolving Galaxy Ecosystems Across All Scales Hong Kong
Oral presentation Dec 2023
Dynamics and Quenching of Central and Satellite Galaxies

Galaxy Fromation: Observations and Physics of AGN Feedback Hangzhou
Oral presentation Oct 2023
Dynamical Hotness, Star Formation Quenching and Growth of Supermassive Black Holes

East-Asia AGN Workshop 2023 Kagoshima, Japan
Poster Sep 2023
Dynamical Hotness, Star Formation Quenching and Growth of Supermassive Black Holes

Coevolution and AGN Feedback Wuhu
Oral presentation Sep 2023
Dynamical Hotness, Star Formation Quenching and Growth of Supermassive Black Holes

Workshop on Cosmology and Galaxy Formation Shanghai
Oral presentation Jun 2023
Dynamical Hotness, Star Formation Quenching and Growth of Supermassive Black Holes

Scholarships and Awards

- Ranked No.1 Outstanding Scholarship at USTC 2023
- Ranked No.2 Outstanding Scholarship at USTC 2022
- Ranked No.2 Outstanding Scholarship at USTC 2021
- Wang Shouguan Talent Program in Astronomy 2018–2019
- Ranked No.2 Outstanding Freshman Scholarship at USTC 2015

Skills

- **Language**: Chinese (native), English (fluent, TOEFL: 102)
- **Programming**: C, C++, Python, Java, Latex, HTML, Mathematica, SQL