

Yuqian Gui

Website: <https://yq-gui.github.io>
Email: guiyq.thu@gmail.com
gyq24@mails.tsinghua.edu.cn
GitHub: github.com/yq-gui

EDUCATION

Department of Astronomy, Tsinghua University
Ph.D. student, Supervisor: Dandan Xu

Beijing, China
2024 - Current

Zhili College, Tsinghua University
B.S. in Physics, GPA:3.85/4.00
Thesis: *Observational properties of episodic star-forming galaxies*, Supervisor: Dandan Xu

Beijing, China
2020 - 2024

RESEARCH EXPERIENCE

Gas Kinematics in M31 CGM

Mentored by Zhijie Qu

Department of Astronomy, Tsinghua University
Jun. 2025 - Current

- Investigate the cold gas kinematics using QSO spectroscopy and HI emission.

Galaxies Evolution in IllustrisTNG

Mentored by Dandan Xu

Department of Astronomy, Tsinghua University
May. 2023 - Current

- Investigate the episodic star formation histories of star-forming galaxies by using IllustrisTNG-100. The paper has been submitted.

KMTNet AnomalyFinder Microlensing Planets

Mentored by Shude Mao

Department of Astronomy, Tsinghua University
Jun. 2022 - Aug. 2024

- Joined “Mass-Production for KMTNet AnomalyFinder Planets” project which analyzes 2016 - 2019 microlensing events, and published a paper about 2017 low-cadence events.

HONORS AND AWARDS

- Tsinghua Comprehensive Outstanding Scholarship (Second Class), Tsinghua University 2025
- Graduate with distinction, Beijing Municipal Education Commission 2024
- Tsinghua Comprehensive Outstanding Scholarship, Tsinghua University 2023
- Tsinghua-ICBC Comprehensive Outstanding Scholarship, Tsinghua University 2022
- Excellent Volunteer Scholarship, Zhili College, Tsinghua University 2022
- Tsinghua Comprehensive Outstanding Scholarship, Tsinghua University 2021

PUBLICATIONS

- [1] Y. Gui et al. “Episodic Star Formation – I. Overview and Scatter of the Star-Forming Main Sequence”. In: *arXiv e-prints*, arXiv:2512.00151 (Nov. 2025), arXiv:2512.00151. DOI: [10.48550/arXiv.2512.00151](https://doi.org/10.48550/arXiv.2512.00151). arXiv: [2512.00151 \[astro-ph.GA\]](https://arxiv.org/abs/2512.00151).
- [2] Y. Gui et al. “Systematic KMTNet Planetary Anomaly Search. XII. Complete Sample of 2017 Subprime Field Planets”. In: 168.2, 49 (Aug. 2024), p. 49. DOI: [10.3847/1538-3881/ad4ce5](https://doi.org/10.3847/1538-3881/ad4ce5).

REPORTS AND TALKS

1. **Episodic star formation and its imprint on satter of SFMS**
PKU+THU Joint Postdoc Forum 2025@Peking University Lightning Talk
Dec. 2, 2025
2. **Episodic evolutionary history of present-day star-forming galaxies**
12th Sino-German Meeting@Sichuan, China Lightning Talk
Sept. 23, 2025

3. Episodic evolutionary history of present-day star-forming galaxies	Lightning Talk
"Ten Billion Years of Galactic Ecosystem Evolution" Meeting@Tsinghua University	<i>Jun. 18, 2025</i>
4. Episodic evolutionary history of present-day star-forming galaxies	Contributed Talk
27th Guoshoujing Meeting@Hunan, China	<i>May. 26, 2025</i>

TEACHING EXPERIENCE

Observational Cosmology: from the Solar System to the Distant Universe

Teaching Assistant

Tsinghua University

Sept. 2025 - Jan. 2026

Probability Theory

Teaching Assistant

Tsinghua University

Feb. 2025 - Jun. 2025

Linear Algebra

Teaching Assistant

Tsinghua University

Sept. 2024 - Jan. 2025

SKILLS

- **Programming Language** - Python, C, MATLAB
- **Tools** - NumPy, Pandas, Scipy, Matplotlib, L^AT_EX
- **Language** - Native Chinese speaker, fluent English, entry-level Spanish