Last Update: *October 21, 2026*

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 — Beijing, China
Ph.D. student, Supervisor: Dandan Xu — *2024–Current*

Department of Physics, University of Bath — Bath, United Kingdom
Visiting Ph.D. student, Host: Stijn Wuyts — *Oct. 2026–Current*

Zhili College, Tsinghua University — Beijing, China
B.S. in Physics, GPA:3.85/4.00 — *2020–2024*
Thesis: *Observational properties of episodic star-forming galaxies*, Supervisor: Dandan Xu

RESEARCH EXPERIENCE

Largest Disks in Euclid — Department of Physics, University of Bath
Mentored by Stijn Wuyts — *Oct. 2026–Current*

- Investigate the origin and evolution of largest disk galaxies in Euclid.

Kinematics of M31 CGM — Department of Astronomy, Tsinghua University
Mentored by Zhijie Qu — *Jun. 2025–Current*

- Try to understand the interplay between M31 evolution and its surrounding gas by investigating the cold gas kinematics using QSO spectroscopy and HI emission.

Episodic Star Formation in IllustrisTNG — Department of Astronomy, Tsinghua University
Mentored by Dandan Xu — *May. 2023–Current*

- Investigate the episodic star formation histories of star-forming galaxies by using IllustrisTNG-100. First paper of the series has been published in *ApJ*. Second paper is in preparation.

KMTNet AnomalyFinder Microlensing Planets — Department of Astronomy, Tsinghua University
Mentored by Shude Mao — *Jun. 2022–Aug. 2024*

- Joined the "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, 2026*
- Graduate with Distinction, Beijing Municipal Education Commission — *2024*
- Tsinghua Comprehensive Outstanding Scholarship, Tsinghua University — *2022, 2023, 2024*
- Excellent Volunteer Scholarship, Zhili College, Tsinghua University — *2022*

PUBLICATIONS

First-author papers

[1] **Y. Gui**, D. Xu, H. Wang, X. Mei, E. Wang, C. Li, and S. Wuyts. "Episodic Star Formation. I. Overview and Scatter of the Star-forming Main Sequence". In: *Astrophys. J.* 1005.1, 35 (June 2026), p. 35. DOI: 10.3847/1538-4357/ae75ec. arXiv: 2512.00151 [astro-ph.GA].

[2] **Y. Gui**, W. Zang, R. Zhai, et al. "Systematic KMTNet Planetary Anomaly Search. XII. Complete Sample of 2017 Subprime Field Planets". In: *Astron. J.* 168.2, 49 (Aug. 2024), p. 49. DOI: 10.3847/1538-3881/ad4ce5.

REPORTS AND TALKS

1. **Episodic star formation and its imprint on scatter of SFMS** — Lightning Talk
   PKU+THU Joint Postdoc Forum 2025@Peking University — *Dec. 2, 2025*
2. **Episodic evolutionary history of present-day star-forming galaxies** — Lightning Talk
   12th Sino-German Meeting@Sichuan, China — *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 — *Jun. 18, 2025*
4. **Episodic evolutionary history of present-day star-forming galaxies** — Contributed Talk
   27th Guoshoujing Meeting@Hunan, China — *May. 26, 2025*

TEACHING EXPERIENCE

Galactic Dynamics — Tsinghua University
Teaching Assistant — *Mar. 2026–Jun. 2026*

Observational Cosmology: from the Solar System to the Distant Universe — Tsinghua University
Teaching Assistant — *Sept. 2025–Jan. 2026*

Probability Theory — Tsinghua University
Teaching Assistant — *Feb. 2025–Jun. 2025*

Linear Algebra — Tsinghua University
Teaching Assistant — *Sept. 2024–Jan. 2025*

SKILLS

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