

Curriculum Vitae/Resume

Ruocheng Zhai

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Astronomy

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Education

2020 - present **Tsinghua University**, Beijing, China

B. S. Physics (Expected June 2024)

GPA: [3.86/4.0]

Relevant Coursework: Observational Astronomy, High Energy Astrophysics

2017 - 2020 **Chongqing Nankai Secondary School**, Chongqing, China

Honors and Awards

2023 Visiting Undergraduate Research Program Fellowships, Caltech

2022 Comprehensive Excellence Scholarship, Tsinghua University

2022 Academic Excellence Scholarship, Tsinghua University

2020 Freshman Scholarship, Tsinghua University

Publication

[1] **Zhai, R.**, Poleski, R., Zang, W., et al. 2023, submitted to AJ, [arXiv:2312.08635](https://arxiv.org/abs/2312.08635)
OGLE-2017-BLG-0448Lb: A Low Mass-Ratio Wide-Orbit Microlensing Planet?

[2] **Zhai, R.**, Rodriguez, A. C., Lam, C. Y., et al. 2023, submitted to ApJ, [arXiv:2311.18627](https://arxiv.org/abs/2311.18627)
Microlensing Events in Five Years of Photometry from the Zwicky Transient Facility

Research Experience

2023/07 - 2023/10 VURP Fellow, California Institute of Technology, CA, USA

Search for ZTF microlensing events in DR17

Analyze JWST background field emission lines

Advisors: Shrinivas R. Kulkarni & Charles A. Beichman

2022/01 - 2023/06 Undergraduate Researcher, Tsinghua University, Beijing, China

Analyze KMTNet planetary microlensing events

Advisor: Shude Mao

Presentations and Talks

2023/10 ZTF II 5th Science Meeting, Pasadena, CA

A Systematic Search for Microlensing Events in ZTF DR17

2023/08 Caltech SURF Final Presentation, Pasadena, CA

Progress in Searching for ZTF Microlensing Events

Service

- 2021/06 - 2022/07 Enrollment volunteer of Tsinghua University at Chongqing
Help high school students learn majors and departments of Tsinghua University
- 2021/03 - 2021/07 Outfield Work at Vaccination Spots, Tsinghua University
Provide outfield services for students at vaccination spots
- 2020/11 - 2020/12 Group Review, Tsinghua University
Give lectures to fellow students to help review knowledge for final exams
- 2020/10 - 2022/04 Campus Services, Tsinghua University
Clean the campus lawn and activity rooms
- 2020/09 - 2021/06 Profound Bond with Alma Mater, Tsinghua University
Make posters, write articles, and give speeches to solve concerns of students

Skills

- **Programming:** Python (Numpy, emcee, scipy, Jupyter Notebook), C++, Mathematics, Unix/Linux, \LaTeX .
- **Languages:** English (advanced), Chinese (native).