

Ruocheng Zhai

Department of Physics, Tsinghua University
Beijing 100084, China

drc20@mails.tsinghua.edu.cn
<https://ruochengzhai.github.io>

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

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

Works

[1] **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

Serves and Volunteer

2021/06 - 2022/07 Enrollment volunteers 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 <i>Provide outfield services for students at vaccination spots</i>
2020/11 - 2020/12	Group Review, Tsinghua University <i>Give lectures to fellow students to help review knowledge for final exams.</i>
2020/10 - 2022/04	Campus Services, Tsinghua University <i>Clean the campus lawn and activity rooms.</i>
2020/09 - 2021/06	Profound Bond with Alma Mater, Tsinghua University <i>Make posters, write articles, and give speeches to solve concerns of high school students.</i>

Skills

- **Programming:** Python (Numpy, emcee, scipy, Jupyter Notebook), C++, Mathematica, Unix/Linux, L^AT_EX.
- **Languages:** English (advanced), Chinese (native).