Ruocheng Zhai

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Education

2024 - present	Department of Astronomy & Astrophysics, Penn State, USA Ph.D. student
2020 - 2024	Department of Physics, Tsinghua University, China B.S. Physics. Advisor: Shude Mao

Honors and Awards

2025 University Graduate Fellowship, Penn State
2024 Paul M. Doty Distinguished Graduate Fellowship, Penn State
2023 Visiting Undergraduate Research Program Fellowships, Caltech

Publication

[1] **Zhai, R.**, Lee, M., Gan, T., et al. 2025, ApJ, 10.3847/1538-4357/adf557
Dynamical Instability of Multiplanet Systems and Free-floating Planets

[2] **Zhai, R.**, Rodriguez, A. C., Mao, S., et al. 2025, ApJ, 10.3847/1538-4357/ad94e7
Microlensing Events in Five Years of Photometry from the Zwicky Transient Facility

[3] Gui, Y., Zang, W., **Zhai, R.**, et al. 2024, AJ, 10.3847/1538-3881/ad4ce5
Systematic KMTNet Planetary Anomaly Search. XII. Complete Sample of 2017 Subprime Field Planets

[4] **Zhai, R.**, Poleski, R., Zang, W., et al. 2024, AJ, 10.3847/1538-3881/ad284f
OGLE-2017-BLG-0448Lb: A Low Mass-Ratio Wide-Orbit Microlensing Planet?

Presentations and Talks

2023/10	ZTF II 5th Science Meeting, Pasadena, CA, USA A *Systematic Search for Microlensing Events in ZTF DR17*
2025/11	2025 Annual Meeting of the APS Mid-Atlantic Section, Harrisburg, PA, USA *Exploring Composition Mixing in Kilonova Ejecta with Ray-by-ray Simulations*

Skills

- **Programming**: Python, Fortran, C++, Julia, Mathematica, Unix/Linux, LaTeX.
- **Languages**: English (advanced), Chinese (native).