Wei Zhu (祝伟)

Personal Information

Associate Professor (tenure-track)
Department of Astronomy
Tsinghua University
Beijing, China

Orcid: 0000-0003-4027-4711
Email: weizhu@mail.tsinghua.edu.cn
Website: http://i.astro.tsinghua.edu.cn/~wzhu

Employment

2023.06 –	Associate Professor (tenure-track), Department of Astronomy, Tsinghua University
2021.02 – 2023.06	Assistant Professor, Department of Astronomy, Tsinghua University
2017.09 – 2021.02	Postdoctoral Fellow, Senior Research Associate, Canadian Institute for Theoretical Astrophysics (CITA), University of Toronto, Canada

Education

2013.08 – 2017.08	PhD in Astronomy, The Ohio State University, Columbus, USA Thesis: Microlens mass determinations from space-based parallax Advisor: Prof. Andrew Gould
2009.09 – 2013.07	BS in Astronomy, Peking University, Beijing, China

Research Interests

Applications of gravitational microlensing; Planet detection and characterization; Architecture and dynamics of multi-planet systems; Detection and characterization of stellar remnants.

Professional Services

Since 2016	Referee for many astronomical journals, including A&A, AJ, ApJ, ApJL, JKAS, MNRAS, PASP, RAA, etc
2021 –	Tsinghua DoA Academic Talk Committee, chair (2022–2023)
2020	Chinese Telescope Access Program (TAP) external reviewer
2020	US NSF proposal review panel
2019, 2020	CITA fellowship review committee
2019 – 2020	CITA Visitor Committee
2018 – 2019	University of Toronto Astro-ph Discussion Committee
2018 Fall	Organizer of the UofT Stars/Planets Discussion

Selected Talks, Colloquia & Seminars

2023.09	Astronomy Colloquium, Shanghai Jiao Tong University
2021.06	National Conference on Planetary Science [slides], Suzhou, Jiangsu
2021.05	Astrophysics Colloquium, Shanghai Astronomical Observatory (SHAO)
2020.11	Exoplanet Demographics [slides], online conference
2020.01	Astronomy Colloquium [slides], Peking University, Beijing, China
2019.12	Astronomy Colloquium, Tsinghua University, Beijing, China

2019.09 Ringberg Castle Workshop – From protoplanetary discs to planetary systems [slides], Tegernsee, Germany
2019.08 Extreme Solar System IV [slides], Reykjavik, Iceland
2019.03 Kepler & K2 Science Conference V [slides], Glendale CA, USA
2018.10 Astronomy Colloquium, University of Toronto, Canada

Teaching Experience

Since 2022	Instructor, *Black Holes & Compact Objects*
2022 Spring	Instructor, *Astro Student Seminar*[course website]
2021 Fall	Instructor, *Astro Student Seminar*[course website]
2019, 2020	Lecturer for UofT SURP 101 lecture series [2019 slides][2020 slides]
2018.11	Guest lecturer for AST221-Stars & Planets (Instructor: Prof. Yanqin Wu)
2017 – 2020	CITA blackboard talks (pedagogical lectures, 5 in total)
2016 Fall	Teaching assistant for Astronomy 1101

First-Author & Student-Led (*) Publications

30. *Espinoza-Retamal, J. I., **Zhu, W.**, & Petrovich, C., *Prospects from TESS and Gaia to constrain the flatness of planetary systems*, submitted
29. **Zhu, W.**, *The metallicity dimension of the super Earth–cold Jupiter correlation*, submitted
28. *Zhao, H. (赵海萌) & **Zhu, W.**, *MAGIC: Microlensing Analysis Guided by Intelligent Computation*, 2022, AJ, 164, 192
(An earlier version of this work was accepted to the ICML 2022 Workshop on Machine Learning for Astrophysics)
27. **Zhu, W.**, Bernhard, K., Dai, F., et al., *Two Candidate KH 15D-like Systems from the Zwicky Transient Facility*, 2022, ApJL, 933, 21
26. **Zhu, W.**, *The intrinsic multiplicity distribution of exoplanets revealed from the radial velocity method*, 2022, AJ, 164, 5
25. *Jiang, H. (蒋昊昌), **Zhu, W.**, & Ormel, C., *No significant correlation between emission line and continuum substructures in MAPS*, 2022, ApJL, 924, L31
24. *Wang, H. (王涵悦), Zang, W., **Zhu, W.**, et al., *Systematic KMTNet planetary anomaly search, paper III: One wide-orbit planet and two stellar binaries*, 2022, MNRAS, 510, 1778
23. *Ma, X. (马潇依), **Zhu, W.**, & Yang, H., *Identification of stellar-mass black hole binaries and the validity of linear orbital motion approximation in microlensing*, 2022, MNRAS, 513, 5088
22. *Yan, S. (颜实) & **Zhu, W.**, *Measuring microlensing parallax via simultaneous observations from Chinese Space Station Telescope and Roman Telescope*, 2022, RAA, 22, 025006
21. **Zhu, W.** & Dong, S., *Exoplanet statistics and theoretical implications*, 2021, ARA&A, 59, 291
20. *Poon, M., Zanazzi, J. J., & **Zhu, W.**, *Constraining the circumbinary disk tilt in the KH 15D system*, 2021, MNRAS, 503, 1599
19. *Karolinski, N. & **Zhu, W.**, *Detecting isolated stellar-mass black holes in the absence of microlensing parallax effect*, 2020, MNRAS, 498, L25
18. **Zhu, W.**, *On the patterns observed in Kepler multi-planet systems*, 2020, AJ, 159, 188
17. *Madsen, S. & **Zhu, W.**, *A Pair of Planets Likely in Mean-motion Resonance from Gravitational Microlensing*, 2019, ApJL, 878, L29

16. *Herman, M., **Zhu, W.**, & Wu, Y., *Revisiting the Long-Period Transiting Planets from Kepler*, 2019, AJ, 157, 248
15. **Zhu, W.**, *Influence of Stellar Metallicity on Occurrence Rates of Planets and Planetary Systems*, 2019, ApJ, 873, 8
14. **Zhu, W.**, Dai, F., & Masuda, K., *Kepler-730b is Probably a Hot Jupiter with a Small Companion*, 2018, RNAAS, 2, 160
13. **Zhu, W.** & Wu, Y., *The Super Earth-Cold Jupiter Relations*, 2018, AJ, 156, 92
12. **Zhu, W.**, Petrovich, C., Wu, Y., et al., *About 30% of Sun-like Stars Have Kepler-like Planetary Systems: A Study of their Intrinsic Architecture*, 2018, ApJ, 860, 101
11. **Zhu, W.**, Udalski, A., Huang, C., et al., *An Isolated Microlens Observed by K2, Spitzer and Earth*, 2017, ApJL, 849, 31
10. **Zhu, W.**, Udalski, A., Calchi Novati, S., et al., *Toward a Galactic Distribution of Planets. I. Methodology & Planet Sensitivities of the 2015 High-cadence Spitzer Microlens Sample*, 2017, AJ, 154, 210
9. **Zhu, W.**, Huang, C., Udalski, A., et al., *Extracting Microlensing Signals from* K2 *Campaign 9*, 2017, PASP, 129, 104501
8. **Zhu, W.**, Wang, J., & Huang, C., *Dependence of Small Planet Frequency on Stellar Metallicity Hidden by Their Prevalence*, 2016, ApJ, 832, 196
7. **Zhu, W.** & Gould, A., *Augmenting* WFIRST *Microlensing with a Ground-based Telescope Network*, 2016, JKAS, 49, 93
6. **Zhu, W.**, Calchi Novati, S., Gould, A., et al., *Mass Measurements of Isolated Objects from Space-based Microlensing*, 2016, ApJ, 825, 60
5. **Zhu, W.**, Gould, A., Beichman, C., et al., *Planet Sensitivity from Combined Ground- and Space-based Microlensing Observations*, 2015, ApJ, 814, 129
4. **Zhu, W.**, Udalski, A., Gould, A., et al., *Spitzer as Microlens Parallax Satellite: Mass and Distance Measurements of Binary Lens System OGLE-2014-BLG-1050L*, 2015, ApJ, 805, 8
3. **Zhu, W.**, Huang, C., Zhou, G., & Lin, D.N.C., *Constraining the Oblateness of Kepler Planets*, 2014, ApJ, 796, 67
2. **Zhu, W.**, Gould, A., Penny, M., et al., *Empirical Study of Simulated Two-planet Microlensing Events*, 2014, ApJ, 794, 53
1. **Zhu, W.**, Penny, M., Mao, S., et al., *Predictions for Microlensing Planetary Events from Core Accretion Theory*, 2014, ApJ, 788, 73

Please check out this ADS link for the list of all refereed publications.