

Yufan Zhou

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(CV updated on Feb 7, 2026)

Education

- **Nanjing University** **Nanjing**
○ *B.S. and Ph.D. in Astronomy and Astrophysics, Advisor: Prof. Zhiyuan Li* *2018–2027*

Research Interests

- Morphology and Properties of the Circumgalactic Medium in Galaxy Interaction Simulations
- Formation and Destruction of Stellar Bars and Spiral Arms Caused by Galactic collisions
- Orbital Evolution of Small Bodies in Solar System Numerical Simulations
- Influence of Globular Clusters on Passing Stars in Numerical Simulations

Publications

3 first/corresponding author (+1 submitted), 1 co-author

First/corresponding Author:

- F4. **Zhou, Yufan**; Li, Zhiyuan; Óscar Jiménez-Arranz; Santi Roca-Fàbrega. 2026, ApJ, submitted. "Survival or destruction: effects of satellite collisions on bars in Milky Way-like galaxies"
- F3. **Zhou, Yufan**; Li, Zhiyuan & Li, Hui. 2025, ApJ, 988, 205. "N-body simulations of galaxy bars generated by satellite collisions: effects of the impact geometry"
- F2. **Zhou, Yufan**; Li, Zhiyuan; Li, Hailiang & Zhou, Liyong. 2025, MNRAS, 538, 258. "Prediction for close approaches with terrestrial planets of asteroids from the main belt"
- F1. **Zhou, Yufan**; Li, Hailiang; Li, Zhiyuan & Zhou, Liyong. 2024, MNRAS, 532, L7. "MARTIANS (MARs2020, TIANwen and So on) would see more potentially hazardous asteroids than Earthlings"

Co-Author:

- C1. Li, Zongnan; Wang, Sumin; Su, Zhao & **Zhou, Yufan**; et al. 2025, ApJ, 983, 182. "Ring or no ring – Revisiting the Multiphase Nuclear Environment in M31"

Accepted Proposals

- "Hunting for Near-Mars Asteroids with JST", 2025, Co-PI, Observatorio Astrofísico de Javalambre: JST250-JPCam, 5.41h
- "Illuminating the Outburst: A SITELLE View of M31's Turbulent Past", 2025, Co-I, Canada France Hawaii Telescope: SITELLE, 6h
- "Smoking Gun of A kpc-scale Outflow in the Disk of M31?", 2023, Co-I, Canada France Hawaii Telescope: SITELLE, 5.3h
- "A Triple Galaxy System Caught in the Act of Merging", 2023, Co-I, Chandra: ACIS, 60ks

Technical skills

- **Programming Languages:** Python, C, C++, Fortran
- **Simulation Codes:** GADGET, GIZMO, Mercury6, PeTar

- **Parallel Computing:** MPI, OpenMP, CUDA
- **Analysis and Writing:** Matlab, \LaTeX

Conferences & Seminars

- **Invited Talk** at International Teeminar Online Meeting (Heidelberg & Beijing), Online, Mar. 2026
- **Talk** at Cosmic Collisions Conference (NYU Abu Dhabi), Abu Dhabi, The United Arab Emirates, Jan. 2026
- Galaxy Ecosystem 2025 Annual Conference, Suzhou, China, Dec. 2025
- **Talk** at Seminar on Galaxy Mergers and Interactions in the Age of Space Telescopes, Suzhou, China, Jun. 2025
- **Talk** at The 6th Youth Planetary Forum, Huangshan, China, Mar. 2025
- Seminar on X-ray telescopes, Suzhou, China, Feb. 2025
- **Talk** at Frontier Symposium on Planetary Science and Deep Space Exploration of the CAS, Xiamen, China, Dec. 2024
- Seminar on MEAYIN Scientific Targets & Solar System Celestial Body Exploration, Suzhou, China, Nov. 2024
- **Talk** at Scientific Symposium on the Andromeda Galaxy M31, Suzhou, China, Oct. 2024
- **Talk** at National Planetary Science Conference, Nanjing, China, Oct. 2024
- **Talk** at The 45th COSPAR Scientific Assembly, Busan, Korea, Jul. 2024
- Seminar on Deep Space Polarization Detection, Suzhou, China, Jan. 2024
- Youth Forum on Deep Space Exploration, Suzhou, China, Dec. 2023
- **Poster** at Frontier Symposium on Planetary Science and Deep Space Exploration of CAS, Tengchong, China, Nov. 2023
- **Talk** at The 3rd China Space Science Assembly, Huzhou, China, Oct. 2023
- **Talk** at Annual Meeting of the Chinese Astronomical Society, Weihai, China, Aug. 2023

Honors and Awards

- The First Award of Doctoral Student Talent Scholarship in Nanjing University, 2025
- Excellent Postgraduate Student of Nanjing University, 2025

Outreach

- **Popular science article published in a Chinese magazine** "Travel on a spider - Use spider pulsars for interstellar travel". Amateur Astronomer, 2025, 04: 56-59 (based on arXiv:2411.05038)
- **Volunteer** at the Zuodijiang Observatory Open Day (Apr. 2023; Apr. 2024; Apr. 2025; Nov. 2025)