

# Yingtian “Bill” Chen

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### Education

- **University of Michigan Department of Astronomy** | Ann Arbor, US 2020 – 2026  
M.S. and Ph.D. candidate in Astronomy and Astrophysics
- **Peking University School of Physics** | Beijing, China 2016 – 2020  
B.S. in Physics (with honours)

### Experience

- **Visiting Researcher**, MIT Kavli Institute | Cambridge, US 2019

### Publications

- **10 publications in total:** citations > 110, h-index = 7
- **8 publications as first author:** citations > 100, h-index = 6

#### Publications as first author

1. **Chen**<sup>✉</sup>, **Li**<sup>✉</sup>, & Gnedin (2025) “Stellar streams reveal the mass loss of globular clusters”, *accepted for publication in ApJL*.
2. **Chen**<sup>✉</sup>, Valluri, Gnedin, & Ash (2025) “Improved particle spray algorithm for modeling globular cluster streams”, *ApJS* **276**, 32.
3. **Chen**<sup>✉</sup> & Gnedin (2024) “Galaxy assembly revealed by globular clusters”, *OJAp* **7**, 23.
4. **Chen**<sup>✉</sup> & Gnedin (2024) “Catalogue of model star clusters in the Milky Way and M31 galaxies”, *MNRAS* **527**, 3692.
5. **Chen**<sup>✉</sup> & Gnedin (2023) “Formation of globular clusters in dwarf galaxies of the Local Group”, *MNRAS* **522**, 5638.
6. **Chen**<sup>✉</sup> & Gnedin (2022) “Modeling the kinematics of globular cluster systems”, *MNRAS* **514**, 4736.
7. **Chen**, **Li**<sup>✉</sup>, & Vogelsberger (2021) “Effects of initial density profiles on massive star cluster formation in giant molecular clouds”, *MNRAS* **502**, 6157.
8. **Chen** & **Ma**<sup>✉</sup> (2021) “Novel pre-burst stage of gamma-ray bursts from machine learning”, *JHEAp* **32**, 78.

#### Other publications

9. Sike<sup>✉</sup> et al. [incl. **Chen**] (2025) “Resolving star cluster formation in galaxy simulations with cosmic ray feedback”, *to be submitted to AAS journals*.
10. Ash<sup>✉</sup>, Valluri, **Chen**, & Bell (2024) “Stellar bars form dark matter counterparts in TNG50”, *ApJ* **976**, 189.
11. Pearson<sup>✉</sup>, Bonaca, **Chen**, & Gnedin (2024) “Forecasting the population of globular cluster streams in Milky Way-type galaxies”, *ApJ* **976**, 54.

## Honours and Awards

• Rackham Conference Travel Grant	2023 & 2024
• Rackham International Student Fellowship	2021
• Weiming Physics Scholarship (未名物理学子)	2020
• Outstanding Graduate (北京市普通高等学校优秀毕业生)	2020
• First Prize & Best speaker, Xingcheng Forum (兴诚本科生学术论坛)	2019
• Huabao Funding for Undergraduate Research Program (本科生科研华宝基金)	2018
• National Scholarship (国家奖学金)	2018
• Pacemaker to Merit Student (三好学生标兵)	2018
• Outstanding Award & SIAM Award, Mathematical Contest in Modeling	2018
• Gold Medal, Chinese Physics Olympiad (全国中学生物理竞赛)	2015

## Talks

• Invited talk, <i>DESI MWS telecon</i>   Remote	2024
• Poster & flash talk, <i>DGSCS 2024</i> , University of Chicago   Chicago, US	2024
• Seminar, Peking University, Tsinghua University, Shanghai Normal University, Shanghai Astronomical Observatory, Shanghai Jiao Tong University, Purple Mountain Observatory, Nanjing University, Zhejiang University   Beijing/Shanghai/Nanjing/Hangzhou, China	2024
• Talk, <i>Astronomy graduate student lunch talk series</i> , University of Michigan   Ann Arbor, US	2021 – 2024
• Invited talk, <i>Galaxy formation group meeting</i> , CCA, Flatiron Institute   New York, US	2024
• Invited talk, University of Chicago   Remote	2024
• Invited talk, <i>SMWL V Star Clusters Working Group meeting</i>   Remote	2023
• Conference talk, <i>MODEST-23</i> , Northwestern University   Evanston, US	2023
• Conference talk, <i>Great Lakes Clusters and Streams</i> , University of Michigan   Ann Arbor, US	2023
• Talk, <i>Seminar for undergraduate students</i> , Peking University   Beijing, China	2019
• Talk, <i>Xingcheng Forum</i> , Peking University   Beijing, China	2019
• Talk, <i>Seminar for theoretical physics</i> , Fudan University   Shanghai, China	2019

## Service

### Professional service

• Referee: <i>ApJ</i> and <i>MNRAS</i>	Since 2023
• Session co-chair: <i>DGSCS 2024</i>	2024
• Local organizing committee chair: <i>Great Lakes Clusters and Streams</i>	2023
• Code developer: ART, gala, galax, and galpy	Since 2024
• Organizer: University of Michigan Stellar Halos Group meeting	Since 2024

### University service

- **Organizer:** Astronomy graduate student lunch talks 2024 – 2025
- **Organizer:** Astrocoffee journal club 2022 – 2025
- **Chair:** University of Michigan Chinese astronomers networking group Since 2022
- **Graduate student instructor:** ASTRO 104, 106, and 115 2021 & 2024
- **Organizer:** Preliminary examination preparation club 2022 – 2023
- **Department bread baker** 2021 – 2022

## Skills

- **Programming Languages:** C/C++, Python, Latex, MATLAB, HTML/CSS...
- **Software/packages:** ART, AREPO, GADGET, MPI, AGAMA, gala, galax, galpy, multiprocessing, NumPy, Matplotlib, SciPy, scikit-learn, PyTorch, Astropy, Git, Bootstrap...
- **Languages:** Mandarin Chinese (native), English (fluent)