

Yingtian “Bill” Chen

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Education

- **University of Michigan Department of Astronomy** | Ann Arbor, US 2020 – 2026
Ph.D. candidate in Astronomy and Astrophysics
M.S. 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**[✉], Li[✉], & Gnedin (2025) “Stellar streams reveal the mass loss of globular clusters”, *accepted for publication in ApJL*.
2. **Chen**[✉], Valluri, Gnedin, & Ash (2025) “Improved particle spray algorithm for modeling globular cluster streams”, *ApJS* **276**, 32.
3. **Chen**[✉] & Gnedin (2024) “Galaxy assembly revealed by globular clusters”, *OJAp* **7**, 23.
4. **Chen**[✉] & Gnedin (2024) “Catalogue of model star clusters in the Milky Way and M31 galaxies”, *MNRAS* **527**, 3692.
5. **Chen**[✉] & Gnedin (2023) “Formation of globular clusters in dwarf galaxies of the Local Group”, *MNRAS* **522**, 5638.
6. **Chen**[✉] & Gnedin (2022) “Modeling the kinematics of globular cluster systems”, *MNRAS* **514**, 4736.
7. **Chen**, Li[✉], & Vogelsberger (2021) “Effects of initial density profiles on massive star cluster formation in giant molecular clouds”, *MNRAS* **502**, 6157.
8. **Chen** & Ma[✉] (2021) “Novel pre-burst stage of gamma-ray bursts from machine learning”, *JHEAp* **32**, 78.

Other publications

9. Ash[✉], Valluri, **Chen**, & Bell (2024) “Stellar bars form dark matter counterparts in TNG50”, *ApJ* **976**, 189.
10. Pearson[✉], 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>SMWLX 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, multiprocessing, NumPy, Matplotlib, SciPy, scikit-learn, PyTorch, Astropy, yt, gala, galax, galpy, Git, Bootstrap...
- **Languages:** Mandarin Chinese (native), English (fluent)

References

- **Dr. Oleg Y. Gnedin**, Professor, University of Michigan; [ognedin\(at\)umich.edu](mailto:ognedin(at)umich.edu)
- **Dr. Monica Valluri**, Research Professor, University of Michigan; [mvalluri\(at\)umich.edu](mailto:mvalluri(at)umich.edu)
- **Dr. Hui Li (李辉)**, Assistant Professor, Tsinghua University; [hliastro\(at\)tsinghua.edu.cn](mailto:hliastro(at)tsinghua.edu.cn)