

Haochang Jiang

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Employment

- **Max Planck Institute for Astronomy** Heidelberg, Germany
PSF Fellowship, Host: Myriam Benisty July 2024 - now

Education

- **Tsinghua University** Beijing, China
Ph.D. in Astronomy, Advisor: Chris W. Ormel August 2019 - June 2024
- **European Southern Observatory** Garching bei München, Germany
ESO Studentship, Advisor: Enrique Macías October 2022 - April 2024
- **University of Science and Technology of China** Hefei, Anhui, China
B.Sc. in Astronomy August 2015 - July 2019

Research Interests

- **planet formation** theory, particularly in the context of **pebble accretion**
- **circumstellar disks** (protoplanetary disks, debris disks) formation and evolution
- **(sub)mm interferometry** observation and **astrochemistry** of circumstellar disks
- **high-contrast imaging** on circumstellar disks and extremely young **protoplanets**

Publications [\[ADS\]](#)

As leading-author:

1. **Jiang H.**, Macías E., Guerra-Alvarado O. M., Carrasco-González C., 2024, *A&A*, 682, A32
Grain-size measurements in protoplanetary disks indicate fragile pebbles and low turbulence
2. **Jiang H.**, Wang Y., Ormel C. W., Krijt S., Dong R., 2023, *A&A*, 678, A33
Chemical footprints of giant planet formation. Role of planet accretion in shaping the C/O ratio of protoplanetary disks
3. Wu Y.* , Chen Y.-X.* , **Jiang H.*** , Dong R., Macías E., Lin M.-K., Rosotti G. P., Elbakyan V., 2023, *MNRAS*, 523, 2630
Distinguishing Magnetized Disc Winds from Turbulent Viscosity through Substructure Morphology in Planet-forming Discs * equal contribution
4. **Jiang H.**, Ormel C. W., 2023, *MNRAS*, 518, 3877
Efficient planet formation by pebble accretion in ALMA rings
5. **Jiang H.**, Zhu W., Ormel C. W., 2022, *ApJL*, 924, L31
No Significant Correlation between Line-emission and Continuum Substructures in the

Molecules with ALMA at Planet-forming Scales Program

6. **Jiang H.**, Ormel C. W., 2021, MNRAS, 505, 116
Survival of ALMA rings in the absence of pressure maxima

Others:

1. Wu Y., Liu, S.-F.; **Jiang, H.**; Nayakshin, S., 2024, ApJ, 965, 110
Observability of Substructures in the Planet-forming Disk in the (Sub)centimeter Wavelength with SKA and ngVLA
2. Kuang R., Zang, W., Mao S., Zhang J., **Jiang H.**, 2023, MNRAS, 520, 4540
Simulations of Triple Microlensing Events I: Detectability of a scaled Sun-Jupiter-Saturn System

————— Awarded Telescope Time

- 2024 **JWST**, ID. #5261, NIRCam/Coronagraphy, 7.67 hour (**PI**)
- 2023 **VLT**, 112.26X1, GRAVITY, 3 hour (**PI**)
- 2023 **Subaru**, S23B-TE020-G, SCExAO/VAMPIRES+CHARIS, 2 half-night (**PI**)
- 2022 **Subaru**, S22B-TE019-G, SCExAO/VAMPIRES+CHARIS, 1 half-night (**PI**)
- 2022 **VLT**, 110.245G, MUSE, 3 hour (**PI**)

————— Observing

- 2022 **Subaru**, remote, SCExAO/VAMPIRES+CHARIS, 1 half-night

————— Selected Talks, Seminars & Conferences

Invited Presentations:

- 2023/12 **Seminar**, *Lunch Talk*, SWIFAR, Kunming, Yunnan, China
- 2023/11 **Seminar**, *Lunch Talk*, Leiden Observatory, Leiden, Netherlands
- 2023/11 **Journal club**, *group discussions*, Queen Mary University of London, London, UK
- 2023/11 **Seminar**, *MSSL astro seminar*, University College London, Mullard, UK
- 2023/11 **Seminar**, *Disc group discussions*, University of Exeter, Exeter, UK
- 2023/11 **Seminar**, *Exoplanet Seminar Series*, University of Cambridge, Cambridge, UK
- 2023/10 **Seminar**, *Monday Science Seminar*, University of Wisconsin–Madison, Remote
- 2023/05 **Seminar**, *ET Science Seminar Series*, Shanghai Astronomical Observatory, Remote
- 2023/02 **Journal club**, Steward Observatory, University of Arizona, Remote

- 2022/10 **Seminar**, *DoA Lunch talk*, Tsinghua University, Beijing, China
- 2022/05 **Seminar**, *KIAA-DoA Seminar*, Peking University, Beijing, China
- 2021/05 **Journal club**, *Star and Planet Formation Journal Club*, MPE, Remote

Conference Presentations:

- 2023/12 **Contributed talk**, *Exoplanets & Planet Formation Workshop 2023*, Yanqing, Beijing, China
- 2023/07 **Contributed talk**, *European Astronomical Society Annual Meeting 2023*, Kraków, Poland
- 2023/06 **Contributed talk**, *Emerging Researchers in Exoplanet Science symposium 2023*, New Haven, CT
- 2023/06 **Poster**, *Origins of Solar Systems Gordon Research Conference*, South Hadley, MA
- 2023/03 **Contributed talk**, *Meeting of ALMA Young Astronomers*, Remote
- 2022/11 **Contributed talk**, *Disks and Planets across ESO Facilities*, ESO, Garching, Germany
- 2022/03 **Contributed talk**, *Meeting of ALMA Young Astronomers*, Remote
- 2022/01 **Contributed talk**, *East Asia ALMA Science Workshop 2022*, Remote
- 2021/12 **Contributed talk**, *Annual Meeting of the Chinese Astronomical Society 2021*, Remote
- 2021/06 **Contributed talk**, *Chinese Planetary Science Conference 2021*, Suzhou, Jiangsu, China
- 2021/03 **Contributed talk**, *From cores to codes: planning for the next steps in planet formation*, Remote

Scientific visits:

- 2023/11 **Visitor talk**, McGill University, Remote
- 2023/11 **Visitor talk**, University College London, London, UK
- 2023/11 **Visitor talk**, University of Leicester, Leicester, UK
- 2023/07 **Visitor talk**, Ludwig-Maximilians-Universität München, München, Germany
- 2023/07 **Visitor talk**, Max-Planck-Institut für Astronomie, Heidelberg, Germany
- 2023/07 **Visitor talk**, Institute of Theoretical Astrophysics, Heidelberg University, Heidelberg, Germany
- 2023/06 **Visitor talk**, University of Michigan, Ann Arbor, MI
- 2023/06 **Visitor talk**, Boston University, Boston, MA
- 2023/06 **Visitor talk**, Harvard-Smithsonian Center for Astrophysics, Cambridge, MA
- 2023/05 **Visitor talk**, Lunar and Planetary Laboratory, University of Arizona, Tucson, AZ
- 2023/02 **Visitor talk**, Department of Physics, University of Milan, Milan, Italy
- 2023/02 **Visitor talk**, Observatoire de la Côte d'Azur, Nice, France
- 2022/11 **Visitor talk**, Ludwig-Maximilians-Universität München, München, Germany

2021/11 **Visitor talk**, Departamento de Astronomía, Universidad de Chile, Remote

Teaching & Mentoring

- 2023 Summer **Julia Perła** (w/ **Claudia Toci, Enrique Macías**), M.Sc. student at Adam Mickiewicz University
ESO Summer Research Programme, results in a presentation in the ESO workshop
- 2021 Spring **Teaching Assistant**, *40920013-90 Star & Planet*, Instructor: Chris W. Ormel

Professional Services

- 2023/12 **LOC**, *Exoplanets & Planet Formation Workshop 2023*, Yanqing, Beijing, China
- 2023/09– **Organizer**, *ESO Journal Club*
- 2023/05 **Scientific Assistant**, *ESO Observing Programmes Committee P112*
- 2023– **Referee**, AJ, Nature Astronomy
- 2022/12 **LOC**, *Disks and Planets across ESO Facilities*, Garching bei München, Germany
- 2022/11 **Scientific Assistant**, *ESO Observing Programmes Committee P111*
- 2020–2021 **Organization Assistant**, *Tsinghua DoA Colloquium*

Selected Honors & Awards

- 2024– **PSF Independent Research Fellowship**, *MPIA*, 3 year
- 2022-2024 **ESO Research Studentship**, 1.5 year, >50000 €
- 2022 **Tsinghua Astrophysics Outstanding (TAO) Scholarship**, 30000 ¥ (~4000 \$)
The top student prize for outstanding research in the department, 1 per year among ~70 students
- 2020-2023 **Tsinghua Comprehensive Scholarship**, *multiple times*, total 20000 ¥ (~3000 \$)