

Haochang Jiang (蒋昊昌)

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Education

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

Research Interests

My research interests center around the co-evolution of (proto) planets and their natal disks (protostellar disks, protoplanetary disks, and debris disks) from both theoretical and observational perspectives. Recently, my work has focused on investigating the formation of planetary systems from the pebble rings observed in ALMA. Additionally, I am interested in how the accreting planet interacts with the disk and shapes both disk chemistry and planet atmosphere composition.

Talks, Seminars & Conferences

- Mar 2023 **Contributed talk**, *Meeting of ALMA Young Astronomers*, Remote
- Feb. 2023 **Group meeting**, *Department of Physics, Università degli Studi di Milan*, Milan, Italy
- Feb. 2023 **Group meeting**, *Observatoire de la Côte d'Azur*, Nice, France
- Feb. 2023 **Group meeting**, *Steward Observatory, University of Arizona*, Remote
- Nov 2022 **Contributed talk**, *Disks and Planets across ESO Facilities*, ESO, Garching, Germany
- Nov 2022 **Group meeting**, *Ludwig-Maximilians-Universität München*, München, Germany
- Oct 2022 **SPF Group Meeting**, ESO, Garching, Germany
- Oct 2022 **DoA Lunch talk**, Tsinghua University, Beijing, China
- May 2022 **KIAA-DoA Seminar**, Peking University, Beijing, China
- Mar 2022 **Contributed talk**, *Meeting of ALMA Young Astronomers*, Remote
- Jan 2022 **Contributed talk**, *East Asia ALMA Science Workshop 2022*, Remote
- Dec 2021 **Contributed talk**, *Annual Meeting of the Chinese Astronomical Society 2021*, Remote
- Nov 2021 **Group meeting**, *Departamento de Astronomía, Universidad de Chile*, Remote
- Jul 2021 **Poster**, *2021 Sagan Exoplanet Summer Virtual Workshop*, Remote
- Jun 2021 **Contributed talk**, *Chinese Planetary Science Conference 2021*, Suzhou, Jiangsu, China
- May 2021 **Poster**, *Distorted Astrophysical Discs 2021*, Remote
- May 2021 **Star and Planet Formation Journal Club**, MPI for Extraterrestrial Physics, Remote
- Mar 2021 **Poster**, *Circumplanetary Disks and Satellite Formation II Conference*, Remote
- Mar 2021 **Contributed talk**, *From cores to codes: planning for the next steps in planet formation*, Remote
- Jul 2020 **Poster**, *Exoplanets III*, Remote
- Nov 2019 **Poster**, *Planet Formation Workshop 2019*, NAOJ, Mitaka, Tokyo, Japan

Teaching Experience & Professional Services

- May 2023 **Scientific Assistant**, *ESO Observing Programmes Committee P112*
Dec 2022 **LOC**, *Disks and Planets across ESO Facilities*, Garching bei München, Germany
Nov 2022 **Scientific Assistant**, *ESO Observing Programmes Committee P111*
2020–2021 **Organization Assistant**, *Tsinghua DoA Colloquium*
2021 Spring **Teaching Assistant**, *40920013-90 Star & Planet*, Instructor: Chris W. Ormel

Awarded Telescope Time

- 2022 **Subaru**, 8.2m, SCExAO/VAMPIRES+CHARIS, 0.5 night (PI)
2022 **VLT**, 8.2m, VLT/MUSE, 3 hour (PI)

Publications

Refereed:

1. **Jiang H.**, Ormel C. W., 2021, MNRAS, 505, 116
Survival of ALMA rings in the absence of pressure maxima
2. **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
3. **Jiang H.**, Ormel C. W., 2023, MNRAS, 518, 3877
Efficient planet formation by pebble accretion in ALMA rings
4. 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
5. Wu Y.*, Chen Y.-X.*, **Jiang H.***, Dong R., Macías E., Lin M.-K., Rosotti G. P., Elbakyan V., 2023, MNRAS, in press
Distinguishing Magnetized Disc Winds from Turbulent Viscosity through Substructure Morphology in Planet-forming Discs
* equal contribution

Submitted:

1. **Jiang H.**, Wang Y., Ormel C. W., Krijt S., Dong R., A&A, under review
Chemical footprints of giant planet formation. Role of planet accretion in shaping the C/O ratio of protoplanetary disks