Haochang Jiang (蒋昊昌)

ORCID: 0000-0003-2948-5614

Email: Haochang.Jiang@eso.org
Mobile:+49 0174 2102459

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

I am a fourth-year Ph.D. student at Tsinghua University and am currently based at ESO with an ESO research studentship. My research interests include the chemistry and the evolution of protoplanetary disks, planet formation, and debris disks from both theoretical and observational perspectives. In particular, my recent works have focused on investigating the formation of planet systems from the pebble rings observed in ALMA. I am also interested in how the accreting planet will interact with the disk and shape 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

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

To be submitted or under review:

1. **Jiang H.**, Wang Y. , Ormel C. W., Krijt S., Dong R., to be submitted
   Chemical Footprints of Giant Planet Formation: Role of Planet Accretion in Shaping C/O Ratio of Protoplanetary Disk
2. Wu Y.*, Chen Y.X.*, **Jiang H.***, Dong R., Macías E., Lin M.K., under review
   Distinguishing Magnetized Disc Winds from Turbulent Viscosity through Substructure Morphology in Planet-forming Discs

   * indicates equal contribution