

Haochang Jiang (蒋昊昌)

ORCID: 0000-0003-2948-5614

Homepage: <https://haochangjiang.github.io/>

Email: Haochang.Jiang@eso.org

Mobile: +49 0174 2102459

Education

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

- Jul. 2023 **Visitor talk**, Ludwig-Maximilians-Universität München, München, Germany
- Jul. 2023 **Visitor talk**, Institute of Theoretical Astrophysics, Heidelberg University, Heidelberg, Germany
- Jul. 2023 **Visitor talk**, Ludwig-Maximilians-Universität München, Heidelberg, Germany
- Jul. 2023 **Contributed talk**, *European Astronomical Society Annual Meeting 2023*, Kraków, Poland
- Jun. 2023 **Visitor talk**, University of Michigan, Ann Arbor, MI
- Jun. 2023 **Visitor talk**, Boston University, Boston, AZ
- Jun. 2023 **Visitor talk**, Harvard-Smithsonian Center for Astrophysics, Cambridge, MA
- Jun. 2023 **Contributed talk**, *Emerging Researchers in Exoplanet Science symposium 2023*, New Haven, CT
- Jun. 2023 **Poster**, *Origins of Solar Systems Gordon Research Conference*, South Hadley, MA
- May 2023 **Invited Seminar**, *ET Science Seminar Series*, Remote
- May 2023 **Visitor talk**, Lunar and Planetary Laboratory, University of Arizona, Tucson, AZ
- Mar. 2023 **Contributed talk**, *Meeting of ALMA Young Astronomers*, Remote
- Feb. 2023 **Visitor talk**, *Department of Physics, University of Milan*, Milan, Italy
- Feb. 2023 **Visitor talk**, *Observatoire de la Côte d'Azur*, Nice, France
- Feb. 2023 **Visitor talk**, Steward Observatory, University of Arizona, Remote
- Nov. 2022 **Contributed talk**, *Disks and Planets across ESO Facilities*, ESO, Garching, Germany
- Nov. 2022 **Visitor talk**, Ludwig-Maximilians-Universität München, München, Germany
- Oct. 2022 **SPF group meeting**, ESO, Garching, Germany
- Oct. 2022 **Invited Seminar**, *DoA Lunch talk*, Tsinghua University, Beijing, China
- May 2022 **Invited Seminar**, *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 **Visitor talk**, 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

Jul. 2023 **Co-Advisor of Julia Perla (w/ Claudia Toci, Enrique Macías)**, *ESO Summer Research Programme*
 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

2023 **Subaru**, 8.2m, SCExAO/VAMPIRES+CHARIS, 1.0 night (PI)
 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, 523, 2630
Distinguishing Magnetized Disc Winds from Turbulent Viscosity through Substructure Morphology in

6. **Jiang H.**, Wang Y. , Ormel C. W., Krijt S., Dong R., A&A, in press

Chemical footprints of giant planet formation. Role of planet accretion in shaping the C/O ratio of protoplanetary disks