

Kan Chen

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Employment

- **Kavli Institute for Astronomy and Astrophysics, Peking University** *2025.8 - present*
KIAA Fellow & Boya Fellow *Beijing, China*

Education

- **University College London (UCL)** *2021.11 - 2025.5*
PhD in Astrophysics *London, UK*
Supervisors: Dr. Mihkel Kama & Dr. Paola Pinilla
Thesis: Concertos of planet-disk interactions: thermal and kinematic fingerprints
- **University of Cambridge** *2019.9 - 2020.6*
MASt (=MSc) in Astrophysics *Cambridge, UK*
Supervisor: Dr. Marco Tazzari
Thesis: Characterising the Properties of Protoplanetary Disks with ALMA
- **Nanjing University (NJU)** *2017.9 - 2019.6*
Master candidate of Astrometry and Celestial Mechanics *Nanjing, China*
- **Sun Yat-sen University (SYSU)** *2013.8 - 2017.6*
BEng in Theoretical and Applied Mechanics *Guangzhou, China*

Research Interests

- Protoplanetary disks: simulations of planet-forming disk substructures and kinematics
- Planet formation: theory, in the context of streaming instability
- Disk observations: characterize protoplanetary disk properties with ALMA data

Publications [\[ADS\]](#)

- Planet-induced Gas and Dust Substructure Feedbacks on Disk Thermal Structure
Chen, K., Pinilla, P., Kama, M. 2025, MNRAS, 541, 2830
- Mind the kinematics simulation of planet-disk interactions: time evolution and numerical resolution
Chen, K., & Dong, R. 2024, ApJ, 976, 49
- Planet Gap-opening Feedback on Disk Thermal Structure and Composition
Chen, K., Kama, M., Pinilla, P., & Keyte, L. 2024, MNRAS, 527, 2049
- How Efficient Is the Streaming Instability in Viscous Protoplanetary Disks?
Chen, K., & Lin, M.-K. 2020, ApJ, 891, 132

Awards & Fellowships

- Boya fellowship *2025*
- KIAA fellowship *2025*
- Joint Scholarship of UCL Dean's Prize & China Scholarship Council *2021-2025*

• UCL Astro annual research grant	2021-2025
• UCL Physics and Astronomy PhD Student Conference Fund	2023-2024
• UCL Astro small grants	2023-2024
• ASIAA visiting studentship	2019
• The First Prize Postgraduate Admission Scholarship, NJU	2017
• ASIAA summer studentship	2017
• The First Prize Scholarship, SYSU	2014-2015
• Meritorious Winner, Mathematical Contest in Modeling (USA)	2015

Scientific Talks and Presentations

• Talk , UK & Ireland Discs Meeting 2025, University of Hertfordshire, Hatfield, UK	2025.9
• Seminar , Planet formation group seminar, University of Tokyo, Tokyo, Japan	2025.2
• Talk , Circumplanetary Disks and Satellite Formation III, Kyoto, Japan	2025.1
• Seminar , PDS seminar, Tsinghua University, Beijing, China	2024.12
• Seminar , ESS Lecture, South China University of Technology, Shenzhen, China	2024.12
• Seminar , Exoplanet Seminar, Sun Yat-sen University, Zhuhai, China	2024.12
• Seminar , Exoplanet Seminar, Nanjing University, Naging, China	2024.12
• Talk , 2024 PKU International PhD Student Astronomy Forum, Peking University, China	2024.12
• Seminar , MSSL Astro Seminar, University College London, UK	2024.10
• Poster , New Heights in Planet Formation, Garching, Germany	2024.7
• Talk , London Exoplanet Day, London, UK	2024.5
• Seminar , ET Science Seminar Series, Shanghai Astronomical Observatory, China	2024.4
• Seminar , Astrobiology and Planetary Exploration (APEX) Seminar, London, UK	2024.2
• Talk , Exoplanets and planet formation 2023, Beijing, China	2023.12
• Talk , UK Exoplanet Meeting 2023, London, UK	2023.8
• Poster , Protostars and Planets VII, Kyoto, Japan	2023.4

Teaching and professional services

• Journal Referees , A&A, ApJS	2025-present
• Assistant supervisor for MSci project (with Mihkel Kama), Vanessa Welke, UCL	2025
• LOC , EXOHOST Research Mapping Workshop, London, UK	2024.11
• Assistant supervisor for MSc project (with Paola Pinilla), Andrew Allan, UCL	2023-2024
• Student host , UCL Astro seminar series	2023-2024
• Teaching assistant , Computational practical physics I & II, UCL	2022-2023
• Organiser , UCL Origins of Planetary Chemical Diversity group meeting	2022-2023

Computing Experience

- Kinematic simulations of planet-disk interactions, University of Victoria/Compute Canada, 1.8×10^4 Nvidia A100 GPU hours allocated

Outreach and professional development

Outreach

- **Mentor**, In2ScienceUK initiative ¹ *2023.7*
- **Mentor**, Shift25 initiative ² *2023.7*

Professional development

- **EXOHOST school on Planet formation and populations**, Tartu, Estonia *2024.9*
- **European ALMA School 2024**, Manchester, UK *2024.6*
- **1st Dustbusters School on Protoplanetary Disks**, Gargnano, Italy *2022.5*
- **Sagan Exoplanet Summer Workshop**, online *2021.6*
- **TIARA Summer School on Origins of the Solar System**, Taipei, Taiwan *2018.7*
- **ASIAA Summer Student Program**, Taipei, Taiwan *2017.7-2017.8*

¹<https://in2scienceuk.org>

²<https://www.shift25.org.uk>