

# Kan Chen

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## Employment

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

## Education

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- **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

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- 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 [\[ADS\]](#)

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- 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

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- 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

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• <b>Talk</b> , 10th East Asia Numerical Astrophysics Meeting, Jeju Island, South Korea	2025.9
• <b>Talk</b> , UK & Ireland Discs Meeting 2025, University of Hertfordshire, Hatfield, UK	2025.9
• <b>Seminar</b> , Planet formation group seminar, University of Tokyo, Tokyo, Japan	2025.2
• <b>Talk</b> , Circumplanetary Disks and Satellite Formation III, Kyoto, Japan	2025.1
• <b>Seminar</b> , PDS seminar, Tsinghua University, Beijing, China	2024.12
• <b>Seminar</b> , ESS Lecture, South China University of Technology, Shenzhen, China	2024.12
• <b>Seminar</b> , Exoplanet Seminar, Sun Yat-sen University, Zhuhai, China	2024.12
• <b>Seminar</b> , Exoplanet Seminar, Nanjing University, Nanjing, China	2024.12
• <b>Talk</b> , 2024 PKU International PhD Student Astronomy Forum, Peking University, China	2024.12
• <b>Seminar</b> , MSSL Astro Seminar, University College London, UK	2024.10
• <b>Poster</b> , New Heights in Planet Formation, Garching, Germany	2024.7
• <b>Talk</b> , London Exoplanet Day, London, UK	2024.5
• <b>Seminar</b> , ET Science Seminar Series, Shanghai Astronomical Observatory, China	2024.4
• <b>Seminar</b> , Astrobiology and Planetary Exploration (APEX) Seminar, London, UK	2024.2
• <b>Talk</b> , Exoplanets and planet formation 2023, Beijing, China	2023.12
• <b>Talk</b> , UK Exoplanet Meeting 2023, London, UK	2023.8
• <b>Poster</b> , Protostars and Planets VII, Kyoto, Japan	2023.4

## Teaching and professional services

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

## Computing Experience

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

## Outreach and professional development

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### Outreach

- **Mentor**, In2ScienceUK initiative <sup>1</sup> *2023.7*
- **Mentor**, Shift25 initiative <sup>2</sup> *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*

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<sup>1</sup><https://in2scienceuk.org>

<sup>2</sup><https://www.shift25.org.uk>