

# Kan Chen

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## Education

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- **University College London (UCL)** *2021.11 - 2025.5*  
PhD candidate in Astrophysics  
Supervisors: Dr. Mihkel Kama & Dr. Paola Pinilla  
*London, UK*
- **University of Cambridge** *2019.9 - 2020.6*  
MASt (=MSc) in Astrophysics  
Supervisor: Dr. Marco Tazzari  
Thesis: Characterising the Properties of Protoplanetary Disks with ALMA  
*Cambridge, UK*
- **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 and disk interactions 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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- 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

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- Joint Scholarship of UCL Dean's Prize & China Scholarship Council (**£42,200×4**) *2021-2025*
- UCL Astro annual research grant (**£1,200×4**) *2021-2025*
- UCL Physics and Astronomy PhD Student Conference Fund (**£1,100**) *2023-2024*
- UCL Astro small grants (**£1,000**) *2023-2024*
- ASIAA visiting studentship (**£1,200**) *2019*
- The First Prize Postgraduate Admission Scholarship, NJU (**£1,000**) *2017*
- ASIAA summer studentship (**£800**) *2017*
- The First Prize Scholarship, SYSU (**top 3%, £220**) *2014-2015*
- Meritorious Winner, Mathematical Contest in Modeling (USA) *2015*

## Scientific Talks and Presentations

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- **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, online 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, online 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

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- **LOC**, EXOHOST Research Mapping Workshop, London, UK 2024.11
- **Assistant supervisor for master project** (with Paola Pinilla), Andrew Allan, UCL 2023-2024
- **Teaching assistant**, Computational practical physics I & II, UCL 2022-2023
- **Student host**, UCL Astro seminar series 2023-2024
- **Organiser**, 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

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

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

- **TIARA Summer School on Origins of the Solar System, Taipei, Taiwan**

*2018.7*