

Kan Chen

Department of Physics and Astronomy, University College London, kan.chen.21@ucl.ac.uk

Personal website: <https://chenk2017.github.io>

ORCID: [0000-0002-8095-7448](https://orcid.org/0000-0002-8095-7448)

Education

- **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

- 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 [\[ADS\]](#)

- 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

- 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

- **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, Nanjing, 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

- **Journal Referee**, A&A 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

¹<https://in2scienceuk.org>

²<https://www.shift25.org.uk>

- **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*