

# Jiaru Li

Center for Interdisciplinary Exploration and Research in Astrophysics

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## Research Interests

Planetary dynamics; hydrodynamics of protoplanetary disks; planet-disk interactions; gravitational wave sources in accretion disks around active galactic nuclei.

## Education

**Cornell University, Ithaca, NY, USA**

*Sept. 2017 - May 2023*

- **Ph.D.** in Astronomy and Space Sciences, May 2023

◦ **Advisor:** Prof. Dong Lai

◦ **Thesis:** Dynamical Evolution of Multi-Orbiter Systems: Application to Planets, Protoplanetary Disks, and Black Holes

- **M.S.** in Astronomy, Dec 2019

**University of Toronto at Scarborough, Toronto, ON, Canada**

*Sept. 2013 - May 2017*

- **H.B.Sc.** in Physics (Specialist) and Mathematics (Major), May 2017

## Experience

**CIERA Postdoctoral Fellow**

*2023 - present*

*Center for Interdisciplinary Exploration and Research in Astrophysics, Northwestern University*

*Supervisor: Prof. Yoram Lithwick*

**Graduate Research Assistant**

*2017 - 2023*

*Department of Astronomy and Space Sciences, Cornell University*

*Advisor: Prof. Dong Lai*

**CSES Graduate Student Fellow**

*2020 - 2022*

*Theoretical Division, Los Alamos National Laboratory*

*Mentor: Dr. Hui Li*

**UTEA Undergraduate Research Assistant**

*2015 - 2017*

*Department of Physical and Environmental Sciences, University of Toronto at Scarborough*

*Supervisor: Prof. Artur Izmaylov*

## Selected Honors and Awards

**CIERA Postdoctoral Fellowship**, Northwestern University

*2023*

**CSES Student Fellowship**, Los Alamos National Laboratory

*2020*

**New Graduate Student Fellowship**, Cornell University

*2017*

**Governor General's Silver Medal Nomination**, University of Toronto

*2017*

**Samuel Beatty In-Course Scholarship**, University of Toronto

*2017*

**University of Toronto Excellence Award**

*2016*

**E-Fund Scholarship**, University of Toronto at Scarborough

*2013 - 2016*

**Vincent Bladen Scholarship**, University of Toronto at Scarborough

*2015*

**A. D. Allen Memorial Scholarship**, University of Toronto at Scarborough

*2014*

## Selected Teaching Experience

**Our Solar System**, Teaching Assistant, Cornell University

*2019*

**From New Worlds to Black Holes**, Teaching Assistant, Cornell University

*2018*

<b>Calculus I &amp; II for Math Major</b> , Teaching Assistant, University of Toronto	2016 - 2017
<b>Physics I &amp; II for Biology Students</b> , Lab Leader, University of Toronto	2016 - 2017
<b>Linear Algebra II</b> , Teaching Assistant, University of Toronto	2016
<b>Discrete Mathematics for Computer Scientists</b> , Teaching Assistant, University of Toronto	2014 - 2015

## Selected Presentations

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### Invited Talks

- 10/2024 - **Seminar:** Theoretical Astrophysics Center Seminar, University of California, Berkeley
- 10/2024 - **Conference:** Transient Phenomena and Physical Processes Around Supermassive Black Holes, Tsung-Dao Lee Institute, China
- 09/2024 - **Seminar:** Department of Astronomy Tea Talk, Indiana University Bloomington
- 08/2024 - **Conference:** New Ideas on the Origin of Black Hole Mergers, Niels Bohr Institute, Denmark
- 03/2024 - **Seminar:** Center for Theory and Computation Seminar, University of Maryland
- 01/2024 - **Seminar:** ET Science Seminar, Shanghai Astronomical Observatory, Chinese Academy of Sciences, China
- 03/2023 - **Conference:** AGN Santa Fe: “Where are the Objects in AGN Disks”, Santa Fe, NM
- 11/2022 - **Seminar:** Center for Exoplanets and Habitable Worlds Seminar, Penn State University
- 10/2022 - **Seminar:** Center for Relativistic Astrophysics Seminar, Georgia Tech

### Other Recent Talks

- 07/2024 - **Conference:** Emerging Researchers in Exoplanet Science Symposium IX, Cornell University
- 05/2024 - **Conference:** The 55th AAS Division on Dynamical Astronomy Meeting, University of Toronto
- 12/2023 - **Conference:** Exoplanets and Planet Formation Workshop, Beijing, China
- 12/2023 - **Conference:** The 32nd Texas Symposium on Relativistic Astrophysics, Shanghai, China
- 05/2023 - **Conference:** The 54th AAS Division on Dynamical Astronomy Meeting, Michigan State University
- 12/2022 - **Group Meeting:** Planetary Formation Group, CCA, Flatiron Institute
- 11/2022 - **Seminar:** Planet Lunch Seminar, Princeton University
- 10/2022 - **Workshop:** Recent Advances in Supermassive Black Holes, Cornell University
- 08/2022 - **Seminar:** Astrophysics Seminar, Los Alamos National Laboratory
- 05/2021 - **Conference:** Distorted Astrophysical Discs, Kavli Institute for Cosmology, Cambridge, UK

## Selected Service

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**Reviewer** for *Monthly Notices of the Royal Astronomical Society* and *Astronomy and Astrophysics*.

**Panelist reviewer** for NASA research program proposals.

**Organizer** for *Center for Interdisciplinary Exploration and Research in Astrophysics* Journal Clubs.