

Xiaoyi Ma

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EDUCATION

Peking University

PhD in Astronomy

Expected June 2028

Beijing, China

University of Victoria

Master of Science

June 2024

Victoria, Canada

University of Toronto

Honours Bachelor of Science with High Distinction

June 2021

Toronto, Canada

Astronomy & Physics Specialist, Physics Specialist, Mathematics Minor

AWARDS

- 2023 Faculty of Graduate Studies (FGS) Travel Award - University of Victoria
- 2023 Victoria Canada-China Friendship Association Scholarship - University of Victoria
- 2023 The R. M. Petrie Memorial Fellowship - Department of Physics & Astronomy, University of Victoria
- 2023 Albert Hung Chao Hong Scholarships - University of Victoria
- 2023 Best poster from the Board - Canadian Astronomical Society (CASCA) Annual General Meeting
- 2023 Graduate Award - University of Victoria
- 2021 College Sliver Medal - St.Michael's College, University of Toronto
- 2021, 2020, 2019, 2018 Dean's List Scholar - University of Toronto
- 2019 John J Sebisty Scholarship - St. Michael's College, University of Toronto
- 2019 Vincent Wroblewski Memorial Bursary - St.Michael's College, University of Toronto

RESEARCH EXPERIENCE

Visiting Student

Department of Astronomy, Peking University

Sep 2022 – Dec 2022

Beijing, China

Supervisor: Dr. Pinghui Huang

Topic: Vortex-induced Rings and Gaps in Protoplanetary Disk — *Paper in Preparation*

Research Assistant

Department of Astronomy, Tsinghua University

Aug 2021 – June 2022

Beijing, China

Supervisor: Dr. Wei Zhu, Dr. Pinghui Huang

Topic: Detecting Stellar-mass Black Hole Binaries via Gravitational Microlensing — *Paper Published*

Topic: Post-process Hydrodynamic Simulation to Generate Synthetic Images of the Dust Continuum Emission.

Undergraduate Research Student

Department of Astronomy & Astrophysics, University of Toronto

Oct 2020 – Jun 2021

Toronto, Canada

Supervisor: Dr. Adam Hincks

Topic: Short-term Variability of Point Sources by The Atacama Cosmology Telescope — *Paper in Preparation*

Summer Research Student*CITA, University of Toronto*

Supervisor: Dr. Wei Zhu

Topic: Detecting Stellar-mass Black Hole Binaries via Gravitational Microlensing

May 2020 – Aug 2020

*Toronto, Canada***Summer Research Student***Department of Physics, Tsinghua University*

Supervisor: Dr. Xiaofeng Wang

Topic: Absolute Magnitude Distribution of Several Types of Supernova.

July 2019 – Aug 2019

*Beijing, China***PUBLICATIONS**

- *Identification of stellar-mass black hole binaries and the validity of linear orbital motion approximation in microlensing*, **Xiaoyi Ma**, Wei Zhu and Hongjing Yang, 2022, MNRAS, 513, 5088 (<https://arxiv.org/abs/2111.11059>)

CONFERENCES AND PRESENTATIONS

East Asian ALMA Science Workshop 2024*Oral Presentation - Testing Vortex Hypotheses in a Protoplanetary Disk*

July 2024

*Siheung, South Korea***Exoplanets & Planet Formation Workshop***Poster Presentation - Vortex-induced rings and gaps in a protoplanetary disk*

December 2023

*Beijing, China***Emerging Researchers in Exoplanet Science Symposium (ERES)***Oral Presentation - Vortex-induced rings and gaps in a protoplanetary disk*

June 2023

*New Haven, USA***Canadian Astronomical Society (CASCA) Annual General Meeting***Poster Presentation - Vortex-induced rings and gaps in a protoplanetary disk*

June 2023

*Penticton, Canada***Athena++ Workshop***Oral Presentation - Vortex-induced rings and gaps in a protoplanetary disk*

May 2023

*New York, USA***Annual Atacama Cosmology Telescope Collaboration Meeting***Oral Presentation - AGN: Short-Term Variability of Bright Point Sources*

Oct 2022

*Remote***Protoplanetary Disk and Planet Formation Summer School***Oral Presentation - Vortex Induced Rings and Gaps*

Aug 2022

*Beijing, China***Chinese Astronomical Society Annual Meeting***Oral Presentation - Detecting Stellar-mass Black Hole Binaries via Gravitational Microlensing*

Dec 2021

*Remote***Annual Atacama Cosmology Telescope Remote Meeting***Oral Presentation - Source and Transient: AGN Variability (with Dr. Adam Hincks)*

July 2021

*Remote***Annual Canadian Conference for Undergraduate Women in Physics (CCUWiP)***Delegate*

Jan 2021

*Toronto, Canada***Student Summer Research Program (SURP)(University of Toronto)***Poster Presentation - Finding Binary Black Holes with Gravitational Microlensing*

Aug 2020

*Toronto, Canada***Annual Canadian Conference for Undergraduate Women in Physics (CCUWiP)***Delegate*

Jan 2020

Toronto, Canada

REFERENCES

Dr. Ruobing Dong – Research Supervisor

Kavli Institute for Astronomy and Astrophysics, Peking University

Email: rbdong@uvic.ca

Dr. Adam Hincks – Former Research Supervisor

Department of Astronomy and Astrophysics, University of Toronto

Email: adam.hincks@utoronto.ca

Dr. Wei Zhu – Former Research Supervisor

Department of Astronomy, Tsinghua University

Email: weizhu@mail.tsinghua.edu.cn