

Huai-Hsuan Sandy Chiu

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Education

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- University of Michigan, Department of Astronomy
Ph.D. candidate in Astronomy and Astrophysics
M.S. in Astronomy and Astrophysics (GPA 3.92/4; no grades below A-) Ann Arbor, MI, USA
Since 2022
 - National Taiwan University
B.S. in Physics (GPA 4.05/4.3) Taipei, Taiwan
2018-2022

Publications

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- H.-H. Sandy Chiu**, Mateusz Ruszkowski, Timon Thomas, Maria Werhahn, Christoph Pfrommer (2024) "Simulating Radio Synchrotron Morphology, Spectra, and Polarization of Cosmic Ray Driven Galactic Winds", *ApJ*, **976**, 136 (2024).
 - H.-H. Sandy Chiu**, Hsi-Yu Schive, Hsiang-Yi Karen Yang, Hsinhao Huang, Massimo Gaspari (2024) "Boosting Supermassive Black Hole Growth in the Early Universe by Fuzzy Dark Matter Solitons", *Phys. Rev. Lett.* **134**, 051402 (2025)

Talks

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- Conference talk**, "Simulating Radio Synchrotron Morphology, Spectra, and Polarization of Cosmic Ray Driven Galactic Winds", 245th AAS meeting, National Harbor, MD, USA 2025
 - Invited talk**, "Simulating Radio Synchrotron Morphology, Spectra, and Polarization of Cosmic Ray Driven Galactic Winds", National Taiwan University, Taipei, Taiwan 2024
 - Conference talk**, "Simulating Radio Synchrotron Morphology, Spectra, and Polarization of Cosmic Ray Driven Galactic Winds", 10th Galaxy evolution workshop, Taipei, Taiwan 2024

Honors and Awards

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- Rackham pre-doctoral Fellowship**, Ann Arbor, MI 2025
 - Rackham Chia-Lun Lo International Student Fellowship**, Ann Arbor, MI 2024
 - Rackham Conference Travel Grant**, Ann Arbor, MI 2024
 - Academic Achievement Award**, award for students ranked in the top 5% of the semester, National Taiwan University, Taipei, Taiwan 2022
 - Best Presentation Award**, "SMBH formation in wave dark matter", National Center for Theoretical Sciences Summer Student Program, Taipei, Taiwan 2021
 - Undergraduate Research Scholarship**, "Magnetohydrodynamics Simulations of the First Galaxy Formation", funding for 8 months, Ministry of Science and Technology, Taipei, Taiwan 2020

Service

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- Teaching Assistant:**
 - Introduction to Astrophysics, University of Michigan 2023 & 2024
 - General Astronomy, National Taiwan University 2022
 - Founder & Lecturer** of Summer Camp of Science and Mathematics, Taichung, Taiwan 2018 & 2019