**Maya Skarbinski**

Department of Physics & Astronomy mskarbi1@jh.edu

Johns Hopkins University Dual Citizen of US & Poland

Bloomberg Center, 3400 N. Charles St. ORCID: 0009-0004-0844-0657

Baltimore, MD 21218, USA

**EDUCATION**

**Johns Hopkins University Baltimore, MD**

Current PhD student. **Sept 2023 – present**

Advised by Dr. Kate Rowlands, Dr. Katey Alatalo and Professor Timothy Heckman

**Harvard University Cambridge, MA**

A.B. joint degree in Astrophysics and Physics (*Summa cum laude*) **May 2023**

Senior thesis: A JWST Library of Galaxy SEDs

**RESEARCH EXPERIENCE**

**Researcher, Harvard-Smithsonian Center for Astrophysics Sept 2022 – May 2023**

Created a galaxy spectral energy distribution library using James Webb Space Telescope observations for my senior thesis. Paper in preparation. Advised by Professor Daniel Eisenstein and Dr. Ben Johnson.

**NSF REU Research Intern, IfA, University of Hawaiʻi at Mānoa May – July 2022**

Tested the method of measuring inclination angles of disk galaxies using synthetic images derived from the IllustrisTNG50 cosmological simulation. Advised by Dr. Hua Gao and Professor Eugene Magnier.

**Researcher, Harvard-Smithsonian Center for Astrophysics June 2021 – May 2022**

Researched the impact of mergers on the physical properties of molecular clouds in a Milky Way-like galaxy. Paper published December 2022 in MNRAS. Advised by Dr. Sarah Jeffreson and Professor Alyssa Goodman.

**Research Intern, Columbia University Astrophysics Laboratory April – June 2019**

Researched coincident detection rates of gravitational waves and high energy neutrinos with the goal of better understanding future data from LISA and IceCube-Gen2. Advised by Dr. Zsuzsanna Marka.

**GRANTS AND AWARDS**

2023 – William H. Miller Fellowship (support for first year of graduate school)

2023 – Hoopes Prize (for outstanding scholarly work or research on my senior thesis)

2023 – Phi Beta Kappa (Harvard University)

2021 – Detur Book Prize (for very high academic standing during the first three semesters at college)

2020, 21, 22 – John Harvard Scholar (top 5% of class at Harvard College)

**PUBLICATIONS**

**Building the molecular cloud population: the role of cloud mergers**, Skarbinski, M. Jeffreson, S. M. R., Goodman, A. A., **MNRAS 519,** 1887 (2023).

**Overview of the JWST Advanced Deep Extragalactic Survey (JADES)**, Eisenstein, D. J., Willott, C., Alberts, S., et al. (incl. Skarbinski, M), ApJS submitted (2023).

**JADES Initial Data Release for the Hubble Ultra Deep Field: Revealing the Faint Infrared Sky with Deep JWST NIRCam Imaging**, Rieke, M. J., Robertson, B. E., Tacchella, S., et al. (incl. Skarbinski, M), ApJS accepted (2023)

**JADES NIRSpec Initial Data Release for the Hubble Ultra Deep Field: Redshifts and Line Fluxes of Distant Galaxies from the Deepest JWST Cycle 1 NIRSpec Multi-Object Spectroscopy**, Bunker, A. J., Cameron, A. J., Curtis-Lake, E., et al. (incl. Skarbinski, M), A&A submitted (2023)

**PRESENTATIONS**

**Poster:** *Building the molecular cloud population: the role of cloud mergers*, AAS 241, January 2023

**TEACHING AND OUTREACH**

**Peer Tutor, Academic Resource Center at Harvard University Sept 2021 – May 2023**

Tutored students in physics, statistics, and applied math classes.

**Co-Chair and Mentor, Society of Physics Students Polaris Program Sept 2021 – May 2023**

Mentored first- and second-year physics students and coordinated the mentorship program in 2022-23.

**Grader, Harvard University Physics Department Sept – Dec 2020**

Graded problem sets for Physics 15a (Introductory Mechanics and Relativity).