Madelyn Leembruggen (she/her)

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EDUCATION

Harvard University, Cambridge, MA

Expected May 2024

PhD Candidate in Theoretical Physics

Ford Pre-Doctoral Fellow | NSF Graduate Fellow | Ashford Fellow

University of Cincinnati, Cincinnati, OH

April 2018

Cambridge, MA

Triple major in Physics, Astrophysics, Mathematics

Goldwater Scholar | Phi Beta Kappa | Louis Stokes Alliance for Minority Participation Scholar Graduation honors:

Presidential Leadership Medal of Excellence, Outstanding Female Senior Award, summa cum laude

SKILLS

Media: Premiere Pro, Photoshop, Lightroom, website maintenance, camera/sound/lighting *Computation:* Python, C++, Mathematica, LaTeX, Word, Excel, PowerPoint *Communication:* Grant writing, public speaking, scripting, curriculum creation, workshop facilitating *Languages:* English (native), French (reading/writing proficient)

SCIENCE COMMUNICATION EXPERIENCE

Jackson Wild Media Lab Fellow

2023

Jackson Wild, Jackson, WY

• Produced a 5-minute documentary from brief to premiere in 5 days, coordinating clients, interviewees, a small production team, and a composer.

Freelance Science Speaker

2021-present

- Sought after technical speaker on computational modeling and thin sheet deformations.
- TEDx speaker and guest science expert on podcasts and YouTube videos

President, Co-Founder, Producer

2020-present

A World of Women in STEM, Cambridge, MA

- Conceptualized, designed, and launched an online learning platform dedicated to 7th-10th graders which receives over 350,000 online interactions per year.
- Leading a team of 25+ contributors split into working groups as we develop multiple pieces of media per month. Supervising the teams from idea conception to final production and marketing.

Content Consultant 2022-present

Galactic Polymath, Minneapolis, MN

• Produce lesson plans and creative assets for grades 5-12 based on current scientific research.

RESEARCH AND TEACHING EXPERIENCE

Physics Department Teaching Fellow

2021-2023

Harvard University, Cambridge, MA

- Received the 2021 White Prize for Excellence in Teaching.
- Taught two intro level undergraduate courses and one advanced graduate level course

Doctoral Researcher Harvard University, Cambridge, MA

2018-present

• Leading and managing doctoral thesis research project to model continuous thin materials; characterize the mechanical properties of wrinkled sheets; and quantify the statistics of crumpling.

Undergraduate Researcher

2015-2018

University of Cincinnati, Cincinnati, OH

• Co-authored 7 papers probing the viability of a theoretical dark matter candidate called the axion, considering a range of proposed properties, and its potentially detectable signatures.

LEADERSHIP

Received the 2020 Robbins Prize for Graduate Student Leadership in recognition of the below work.

Equity & Inclusion Committee, Grad Rep

2019-2022

Harvard University & American Physical Society Inclusion, Diversity, and Equity Alliance (APS-IDEA)

Women in Physics, Co-Chair

2019-2021

Harvard University, Cambridge, MA