# COLEMAN GLIDDON

MIT Building 54, 3 Ames St, Cambridge, MA 02139

#### **EDUCATION**

Massachusetts Institute of Technology, Cambridge, Massachusetts, USA

PhD – Climate Science (in progress)

September 2024–Present

Department of Earth, Atmospheric, and Planetary Sciences

Advisor: Talia Tamarin-Brodsky, PhD

Harvey Mudd College, Claremont, California, USA

BS – Physics, High Distinction with Departmental Honors

September 2019–May 2023

## ACADEMIC HONORS

Warren Klein Fellowship (MIT)	2024
Rojansky Writing Prize (Harvey Mudd)	2021
Harvey S. Mudd Merit Award (Harvey Mudd)	2019

#### **PRESENTATIONS**

Dong, T., Gliddon, C., Li, D., Porto, R., Shuve, B., Tucker-Smith, D. (2023). "UV Freeze-in Leptogenesis via DM Oscillations," American Physical Society April Meeting 2023 [poster presentation].

#### RESEARCH

#### Senior Thesis Student

September 2022–May 2023

Department of Physics, Harvey Mudd College PI: Brian Shuve, PhD

- · Calculated reaction rates for early-Universe particle scatterings used to verify viability of the UV freezein model in later research

· Analyzed the novel "UV freeze-in" model of dark matter generation proposed by PI

· Solved dynamical equations for particle interactions to derive analytical estimates for key cosmological variables under the UV freeze-in model's assumptions

Student Researcher May 2022–July 2022

Department of Physics and Astronomy, Pomona College

PI: Thomas Moore, PhD

- · Assisted PI in developing computer software to simulate detection by the LISA observatory of compactobject binary gravitational wave sources
- · Implemented numerical methods for modeling the time-series behavior of inspiraling binary systems
- · Produced and updated both technical and scientific documentation to assist future program developers and users assumptions

## WORK EXPERIENCE

#### Physics Academic Excellence Facilitator

September 2021–May 2023

Harvey Mudd College

- $\cdot$  Tutored students and facilitated group work in Harvey Mudd's introductory ("core") physics classes with a team of 7–10 students
- · Offered support to students in both physics material and in the transition to collegiate learning
- · Regularly communicated with professors to highlight student progress and difficulties in core courses and advocate for students

# Student Grader

August-November 2020, September 2022-May 2023

Harvey Mudd College, Pomona College

- · Graded problem sets for the courses Special Relativity, Calculus, Mechanics and Wave Motion (advanced), Statistical Mechanics and Thermodynamics, Dynamical Systems
- · Provided individualized feedback to students on submissions and, for Math grading, collaborated with fellow graders to produce general feedback for classes

# TECHNOLOGY EXPERIENCE

Computer Languages Python, Xojo (proficient); Java, MATLAB, Wolfram Language

(some experience)

Software & Tools LaTeX, Mathematica, Maple, Linux, Git/Github