Charles (Charlie) SOWERBY

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EDUCATION

June 2021 University of California, Los Angeles - Bachelor of Science

(Expected) Majors: Physics & Mathematics

GPA: 3.56/4.00

June 2017 University of Chicago, Laboratory Schools (High School)

RELEVANT COURSEWORK MAJOR GPA: 3.61

Physics | Analytic Mechanics (105 A)

Electricity and Magnetism (110 A, B) Quantum and Mechanics (115 A, B, C)

Thermodynamics (112)

Mathematical Methods of Physics (131 A)

Mathematics | Multivariable Calculus

Linear Algebra (115 AH)

Abstract Algebra (110 AH, BH, C) Real Analysis (131 AH, BH) Differential Geometry (120A) (Point-Set) Topology (121)

Computer Science

Intro to Computer Science in C++ (31, 32) Computer Architecture (High School)

Work and Extra Curricular Experience

Spring | Undergraduate Researcher - Camera Module

2020 | Basic Plasma Science Facility, UCLA

Worked on a low latency, inexpensive camera module alternative for rapid plasma imaging.

Spring | Independent Study in Smooth Manifolds

2020 UCLA Mathematics

Studied Smooth/Riemannian Manifolds with the help of UCLA graduate student Nicholas Boschert, using John Lee's $Smooth\ Manifolds$ as a reference text.

Winter | Undergraduate Grader

2020 | Physics 131A

 ${\it Graded homework assignments for Physics 131A: Mathematical Methods in Physics.}$

March-June | Undergraduate Researcher - Relay Circuit

2019 | Basic Plasma Science Facility, UCLA

Worked during the school year to build and program a Raspberry Pi controlled relay circuit to be used for plasma diagnostics.

Spring | Peer Reviewer

2019 | Undergraduate Science Journal, UCLA

OTHER SKILLS

Languages | Python, C++, LATEX, HTML/CSS, Mathematica, Matlab | German

AWARDS & HONORS

 $\begin{array}{c|c} \textbf{Undergrad} & \textbf{College Honors Program} \\ & \textbf{Deans Honors List} \end{array}$

2017 - Present

Fall 2017, Winter 2020