
James Sheplock

1010 E Haley Street, Santa Barbara, CA 93103 • sheplock@ucsb.edu • 610-739-4285

EDUCATION

University of California, Santa Barbara, Candidate for Ph.D. in Physics, 2022 (expected)

Thesis: Search for neutral long-lived particles using clusters in the CMS Barrel Muon System

Activities: Student Fee Advisory Committee (November 2019—December 2021); Physics Circus (September 2019—present); Gauchos for Recovery (July 2019—present); Physics Equity & Inclusion Reading Group (October 2020—present)

GPA: 3.89 (cumulative)

University of Pennsylvania, B.A. *summa cum laude* in Physics & Astronomy and Mathematics, 2017

Honors: Dean's List (8 semesters)

Thesis: Search for supersymmetric top squark with ATLAS detector (Honors Thesis in Physics)

Activities: Peer Advisor Program (April 2014—May 2017); Social Planning and Event Committee (October 2013—May 2016); PennCORP Pre-Orientation Program (August 2013)

GPA: 3.81 (cumulative); 3.84 (Physics & Astronomy); 3.77 (Mathematics)

EXPERIENCE

High-Energy Physics Experimentalist

October 2013 – Present

- Conduct cutting edge research as part of Penn ATLAS and UCSB CMS experimental groups
- Analyze data and simulations using Python/C++ to explore possibility of new physics
- Test new materials with picosecond resolution for upgrade to CMS detector to prepare for future
- Generate presentations and graphs to highlight important results for weekly meetings
- Collaborate with international experiment team on large-scale research projects at LHC

Graduate Student Association, Department of Physics Representative

September 2019 – Present

- Represent the views of Physics graduate students to the wider graduate student community
- Facilitate communication between GSA Board and Physics Department
- Serve as GSA Representative to Student Fee Advisory Committee and make quarterly reports
- Engage in discussions about how best to allocate resources to meet needs of diverse student body

Teaching Assistant

January 2016 – Present

- Aid professor in introductory physics instruction and problem solving
- Lead regular homework help and review sessions to field students' questions
- Grade weekly assignments and provide in-depth solutions

WQHS Radio, Board Member, Blog Manager

September 2013 – May 2017

- Make executive decisions as board member for Penn's student-run radio station
 - Work with small group of blog writers to generate content and manage radio webpage
 - Collaborate with national and international record label agents to promote and cover artists
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SKILLS AND PERSONAL

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| • Proficient in C++, Python, and several other programming languages | • Intermediate Spanish proficiency |
| • Experience working with web design | • Critical analysis and editorial experience |
| | • Vegan cook and meditation advocate |