EDUCATION

PH.D., PHYSICS

Aug. 2017 – Present

University of Wisconsin - Madison

Madison, WI

• Prospective admission to candidacy: Fall 2019

B.S. PHYSICS, B.S. MATHEMATICS

Aug. 2013 – May 2017 Rochester, NY

University of Rochester

- ematics GPA 3 95/4 00: Cumula-
- \circ Graduated $Cum\ Laude$: Physics GPA 3.96/4.00; Mathematics GPA 3.95/4.00; Cumulative GPA 3.82/4.00
- Recipient of Dean's Scholarship; Recipient of Research and Innovation Grant; Dean's List seven of eight semesters
- Completed three-course clusters in both Economics and Ancient Greek
- Notable coursework:
 - Mathematics independent study: Representation Theory: Classification of Semi-simple Lie Algebras and Construction of \mathfrak{g}_2
 - Physics graduate courses: Gravitation (PHY 413); Quantum Mechanics I (PHY 407);
 Quantum Mechanics II (PHY 408)

RESEARCH EXPERIENCE

RESEARCH ASSISTANT

June 2016 - May 2017

Rochester, NY

- Department of Physics & Astronomy
- Worked with Dr. Tamar Friedmann to investigate supersymmetric SO(10) grand unified theories that arise from M-theory.
- Used topological and geometric properties of the compactification space to extract properties of the lower-dimensional particle spectrum.
- Worked with particles and their representations to derive renormalization group equations for several breaking schemes.
- Analyzed energy scales and considered the phenomenological implications of the breaking schemes.

TEACHING EXPERIENCE

GRADUATE TEACHING ASSISTANT

Aug. 2017 – Present

Madison, WI

- o Energy (PHY 115) Spring '18
- General Physics (PHY 104) Fall '17

STUDY GROUP LEADER

Department of Physics

SEPT. 2016 - MAY 2017

Rochester, NY

- $\circ\,$ Lead weekly sessions with a small group of introductory physics students.
- $\circ\,$ Helped students with study strategies and reinforced critical-thinking skills.
- $\circ\,$ Facilitated group discussion and group problem solving.

TEACHING INTERN

Sept. 2014 - May 2017

Rochester, NY

- Department of Physics & Astronomy
 Electricity & Magnetism I (P217) Fall '16
- Honors Modern Physics (PHY 143) Spring '15, Spring '16 and Spring '17
- o Honors Mechanics (PHY 141) Fall '15
- o General Physics I (PHY 113) Fall '14

VOLUNTEER TUTOR

Jan. 2014 - May 2017

Society of Physics Students

Rochester, NY

PROFESSIONAL EXPERIENCE

PROFESSIONAL PEER ADVISER

College Center for Advising Services

Jan. 2016 - May 2017Rochester, NY

- $\circ\,$ As liaison to Department of Physics & Astronomy, served as a resource for students for all things academic.
- Met with students to discuss course planning, research opportunities and other college opportunities.
- Underwent training through College Center for Advising Services to better advise students for their undergraduate careers, gaining knowledge of many university services.

DATABASE DEVELOPER

June 2015 - Aug. 2015

Department of Physics & Astronomy

Rochester, NY

- o Built department database for undergraduate records using FileMaker Pro.
- Learned about database design and writing scripts through the FileMaker Pro software.
- Gained knowledge of HTML and JavaScript while creating a user-friendly interface.

AWARDS AND HONORS

UNDERGRADUATE TEACHING AWARD

May 21, 2017

Presented by the Deptartment of Physics & Astronomy, University of Rochester

TECHNICAL SKILLS

- o Working Knowledge: LaTeX, Mathematica, CalcHEP, Java, FileMaker Pro
- o Basic Knowledge: Python, HTML, JavaScript