

Education

Oregon State University
PhD Physics Education Research

Corvallis, OR
September 2024–Current

Michigan State University
BA Physics

East Lansing, MI
April 2024

- Minor in Computational Mathematics, Science, and Engineering

Research Experience

Michigan State University – Dept. of Physics and Astronomy
Undergraduate Researcher – Physics Education Research Lab

East Lansing, MI
Fall 2022–Fall 2024

- Advisor: Dr. Marcos “Danny” Caballero
- Project: “Cataloging Engagement In Computational Practices In A High School Physics Classroom”
- *Employed a qualitative interview process to try to understand computation being integrated into high school physics classrooms. Through this interview, we explored insights into how the students perceive and interact with computation, as well as the practices employed in the classroom.*

Michigan State University – Dept. of Physics and Astronomy
Undergraduate Researcher – Physics Education Research Lab

East Lansing, MI
Spring 2022–Fall 2022

- Advisors: Dr. Paul Irving & Dr. Daryl McPadden
- Project: “Computation in High School Physics: How the pieces fit together.”
- *Using a card sort interview format, we were able to analyze a students experience to gain insight on how the class is perceived. This lead to conclusions like how there are dissonances in the way this teacher taught physics based on the practice they may be trying to teach, and how a student interacts with those dissonances.*

Posters

1. **J. Rodgers**, P.C. Hamerski, D. McPadden, L. A. H. Wood, M.D. Caballero, “Cataloging Engagement In Computational Practices In A High School Physics Classroom”, *University Undergraduate Research and Arts Forum (UURAF)*, East Lansing, Michigan. April 2023.
2. **J. Rodgers**, P.C. Hamerski, D. McPadden, M.D. Caballero, P.W. Irving, “How do curriculum design decisions influence student expectations around physics and computation in a computation-integrated physics high school classroom?”, *American Association of Physics Teachers Summer Meeting (AAPT)*, Grand Rapids, Michigan. July 2022.
3. **J. Rodgers**, P.C. Hamerski, D. McPadden, M.D. Caballero, P.W. Irving, “How do curriculum design decisions influence student expectations around physics and computation in a computation-integrated physics high school classroom?”, *Oslo PER Summer Institute (OPSI)*, Oslo, Norway. June 2022.

Presentations

Contributed Talks

1. **J. Rodgers**, P.C. Hamerski, D. McPadden, M.D. Caballero, P.W. Irving, “Computation in High School Physics: How the pieces fit together”, *American Association of Physics Teachers Summer Meeting (AAPT)*, Grand Rapids, Michigan. July 2022.

Teaching

Oregon State University

PH indicates the classes taught in the physics department

Fall 2024 PH 211 General Physics with Calculus (Recitation), Graduate Teaching Assistant, 30 students
Winter 2025 PH 202 General Physics (Recitation), Graduate Teaching Assistant, 210 students

Michigan State University

PHY indicates classes taught in the physics department

Spring 2024 PHY 183B Physics for Science and Engineers I, Undergraduate Learning Assistant, 65 students
Fall 2023 PHY 183B Physics for Science and Engineers I, Undergraduate Learning Assistant, 45 students
Spring 2023 PHY 183B Physics for Science and Engineers I, Undergraduate Learning Assistant, 39 students
Fall 2022 PHY 183B Physics for Science and Engineers I, Undergraduate Learning Assistant, 40 students

Curriculum Development

Accessibility Focus, PH 211 (Fall 2024)

Implemented new recitation worksheets to improve accessibility.

Physics Projects Redesign, PHY 183B (2023-2024)

Reconstructed in-class projects to cultivate improved physics learning.

Extracurricular Activities

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| - Member Coalition of Graduate Employees | 2024–Current |
| - Executive Board Member Michigan State University Special Olympics | 2023–2024 |
| <i>Worked closely with other members of E-Board to maintain a stream of communication between E-Board and the members of the club.</i> | |
| - Mentor Michigan State University WaMPS Mentoring Program | 2023–2024 |
| <i>Mentee: Sachet Jain, Physics Major, Michigan State University</i> | |
| - Volunteer Michigan State University Special Olympics | 2022–2024 |
| <i>Facilitate individuals with intellectual disabilities in participating in inclusive sports and other activities.</i> | |
| - Member Society of Physics Students (SPS) Michigan State Chapter Member | 2021–2024 |

Technical Experience

Programming

- **Proficient:** Jupyter, Python, R Studio, SQL

Software

- **Proficient:** Microsoft Office, LaTeX, MAXQDA

Scholarships and Awards

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| • Undergraduate Learning Assistant Award | 2024 |
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