

Sarah Chase

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(805) 895-6401

EDUCATION

University of California, Los Angeles

2017 - 2023

Doctor of Philosophy (PhD), Physics

Master of Science (MS), Physics

University of California, Berkeley

2013 - 2017

Bachelor of Arts (BA), Physics

Bachelor of Arts (BA), Statistics

EXPERIENCE

Google

2019

Software Engineering Intern

- Design and implement an automated experiment to test artificial intelligence ads prediction technology
- Analyze experimental data in Python and determine actionable results for a backend engineering team

RESEARCH

Particle-in-Cell and Kinetic Simulation Software Center

2020 - present

Graduate Student Researcher

- Thesis Committee: Warren Mori (advisor), Paulo Alves, Denise Hinkel, Chan Joshi, George Morales
- Model laser-electron interactions with 2 high-performance simulation codes on 3 supercomputers
- Design new diagnostic to reveal angular momentum of light and plasma waves based on foundational theory
- Predict performance of new lasers for laser-driven fusion experiments
- Present research results through talks and posters at 3 national conferences

Lawrence Livermore National Laboratory

2019 - 2022

High Energy Density Physics Graduate Student Researcher

- Compare simulation results across teams and institutions
- Prepare collaborative publications and present research findings at national conferences
- Determine the relevance of angular momentum to fusion experiments at the National Ignition Facility

TEACHING

UCLA Physics & Astronomy

Teaching Assistant

2017 - 2022

- Introduction to Plasma Electronics (Fall 2019, Fall 2022)
- Quantum Mechanics (Spring 2019)
- Physics for Scientists and Engineers: Oscillations, Waves, E&M Fields (Winter 2019, Fall 2018, Spring 2018)
- Conceptual Physics (Summer 2018)
- Physics for Life Science Majors: Light, Fluids, Thermodynamics, Modern Physics (Winter 2018, Fall 2017)

LEADERSHIP

UCLA Physics & Astronomy

Graduate Student Representative

2020 - 2021

- Represent graduate students on 2 department committees and oversee 8 student programs organizers

Women in Physics Chair

2019 - 2020

- Organize panels, mentorship programs, and outreach activities to support gender minority physicists
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