

2023 ODU/Jefferson Lab REU Presentations at Old Dominion University

Friday, July 28, 2023

Physical Sciences Building II, Room 1100

- 8:45 Arrival at ODU and coffee (served in room 1100)
- 9:00 Welcome to ODU
ODU Physics Chair: Sebastian Kuhn
- 9:30 Millie Barron, Indiana University Purdue
Advisors: Pashupati Dhakal and Eric Lechner
Measurement of Hardness on Cold Rolled Niobium with Heat Treatment
- 9:45 Shoaib Bhatti, Cooper Union
Advisor: Joe Grames
Thermo-Mechanical Simulations of Solid Positron Target
- 10:00 Madison DeGuilio, Tidewater Community College
Advisor: Eric Lechner
Topographic Analysis of High Performance SRF Cavity Surface Preparation
- 10:15 Austin Kuntz, Case Western University
Advisor: Alexandre Camsonne
Preparation of Hydra for Halls A and C
- 10:30 Short Break
- 10:45 Thomas McEntire, University of Buffalo
Advisor: Felix Ringer and Matt Grau
Quantum Simulation of Lattice Field Theories using Pulse-Level Optimization
- 11:00 Alexis Niemiera, University of North Texas
Advisor: Nobuo Sato
Formulating a Framework to Analyze Jet Substructures at the EIC
- 11:15 Jai Peris, University of Texas—Dallas
Advisor: Haipeng Wang
Using Trim Coils to Modify a Magnetron's Magnetic Field
- 11:30 Andrew Tom, Angelo State University
Advisors: Geoff Krafft and Balša Terzić
Calculating the Reduction Factor of an Inverse Compton Source
- 12:00 Annika Tomtschik, Oklahoma Baptist University
Advisors: Ryan Bodenstein, Alex Coxe, Kirsten Dietrick and Donish Kahn

Machine Learning in Accelerator Corrections: FFA Multipass Variability

12:15 Georgios Vassilakopoulos, Old Dominion University

Advisor: Kostas Orginos

Coding and Analyzing Hybrid Monte Carlo Algorithm Variants for Target Posterior Distributions

12:30 Tour of ODU Physics Department

13:30 Lunch in Norfolk