

Room 1: *Liquid Argon Time Projection Chamber Calibration*

- Charge and Energy Calibration of ProtoDUNE-SP detectors, **Graham Chambers**
- Analysis of the impact of different hit finder techniques on charge and energy reconstruction for the ICARUS experiment, **Isabella Maria**

Room 2: *Astrophysics I*

- Discovery and Characterization of a New Ultra-Faint Stellar System with the DELVE Survey, **William Cerny**
- Simulation of and Antenna Design for Broadband Reflector-Based Axion Experiment, **Kate Azar**

Room 3: *Astrophysics II*

- The Ellipticity of Galaxy Clusters at a Large Radius, **Ruben Coronel**
- Adapting DESGW Single Epoch Image Differencing to the LSST Software Stack, **Nathan James**

Room 4: *Quantum Physics*

- Characterization and Automation of Quantum Electronics for Qubit-based Dark Matter Detector, **Michael Andres**
- Simulation of Axion-like Particle Production at DarkQuest, **Elizabeth Marie**

Room 5: *Noise and Signal*

- Comparing Acoustic Signals in the Buildup to a Magnet Quench with the Minimum Quench Energy, **Sujay Sarvajna**
- AI Denoising to Accelerate Detector Simulation, **Lena Franklin**

Room 6: *Muon Physics*

- Measuring Systematic Errors in Simulation Studies of the Mu2e Experiment, **Joel Andrew**
- Optimizing Muon Injection for the Muon g-2 Experiment, **Grace Caroline**

Room 7: *AI for Astrophysics*

- Studying the Effects of Overlapping Objects in Dark Energy, **Katarzyna Krzyzanska**
- DeepBench: Open-Source Tools for A.I. in the Sky, **Tristan Paul**

Room 8: *Neutrinoless searches in DUNE and SuperCDMS*

- $0\nu\beta\beta$ searches at a theoretical DUNE 4th module, **Grace Ellen**
- Characterizing Complex Impedance in TES Detectors for SuperCDMS, **Nishant Mishra**

Room 9: *WIMP and REDTOP*

- Identifying low energy electrons in WIMP Cascade Decays, **Dominic Lehner**
- The Implementation of a 4D Helical Track Fitter in REDTOP Simulations, **Larson Henning**

Room 10: *Advanced Accelerator Concepts*

- Simulation of Third-Integer Resonant Extraction of 800 MeV Protons in the Delivery Ring, **Axel Moreen**
- Localized Tuning of Particle Accelerator Focusing, **Preston Hardcastle**
- Synchrotron Design and Methodical Cell Optics Study, **Aaron Fawley**

Room 11: *AI and Machine Learning for Accelerators*

- (NOICE) Deep Ensemble Confidence Levels for Multi-hot Categorization, **Giovani Leone**
- (NOICE) Neural Optical Image Categorizer for the E-log, **Terence Fodiop**
- (NOICE) Neural Optical Image Categorizer for the E-log, **Justin Rower**

Room 12: *AD Engineering for HEP Experiments*

- Preliminary MAGIS-100 Atom Source Support Design, **Kelsey Scheidt**
- Vacuum Simulations and LED Strip Atom Tracker for MAGIS-100, **Jordan Aasman**
- R&D Of Remote Motion Table and Making a small ripple power supply from 1000 A to 50 parts per million, **Antonio Huanay**

Room 13: *Robotics for Accelerators*

- Radiation Cleaning Robot, **Emily Stachowicz**
- AD Robotics, **Amanda Hoeksema**
- A Long Reach robotic Arm, **Brenda Sanchez**

Room 14: *Environmental Restoration Fermilab Natural Areas*

- Shrubland Management Plan for Habitat Restoration, **Ruben Lopez**