Physics and Astronomy Undergraduate Research Conference

Time and Location: Thursday, May 16th, 9:00AM at CF386

Presenters:

Jacob Curtis presenting *Star Formation in Galaxy Clusters at Moderate Redshift*

Aidan McBride presenting *Gaia Proper Motions of Young Stars in the Orion Star-Forming Region*

Matthew Scoggins presenting *Simulating Strongly Correlated Fermions and Spins with an Optimally Controlled Superconducting Device*

Erin Howard presenting *Applying Machine Learning to Generate Stellar Properties from Spectra*

Nathan Chapman presenting *Ground state phases of a quasi-2D BEC of rigid rotor molecules via Bogoliubov mean-field theory*

Benjamin Saack presenting *Growth and Characterization of Iron Thin Films produced by Sputter Deposition*

Samuel Shuman presenting *Monte-Carlo Modeling for Uncertainties in Color Excess Ratio*

Lance Johnson presenting *Understanding Light Extinction Through Interstellar Dust Toward The Star HD210121*

Chase Boggio presenting *Calculating orbits of eclipsing binaries with APOGEE spectra: The low-n limit*

Mackenzie Jewell presenting *Investigation of Surface Plasmon Resonance Biosensor Sensitivity Using Kretschmann ATR Theory*

Mason Starr presenting *Methodology for the Creation and Analysis of a Comprehensive Mastcam Multispectral Database of Curiosity’s Traverse*

Ethan Cohen presenting *Two Leg Ladder of Interacting Majorana Fermions*

Hunter Goff presenting *Models for Molecular Adsorption with a focus on Nitro-Benzyl Spiropyran*

Lucas Browning presenting *Adsorption of spiropyran on a graphene substrate*

Erick Powell presenting *Velocity Distributions of Red and Blue Galaxies in Clusters*

Jacob Curtis presenting *Instantaneous and Cumulative Star Formation in Moderate Redshift X-ray Clusters*