

Undergraduate Research Projects AY20-21

Faculty Name	Student Name and Project
DeRoo	<ul style="list-style-type: none"> • Samantha Watkins – Methods for Unbiased Outlier Identification in Astronomical Surveys • Jeffrey Leiberton – A Soft X-ray View of the Supernova M31
Folland	<ul style="list-style-type: none"> • John Horne – Infrared Spectroscopy for Identification of Trace Environmental Pollutants • Tristan McMillan – Construction of a Cryogenic Infrared Microscope • Siddharth Nandanwar – Preparation and Characterization of 2D materials • Aditya Desai – Infrared Characterization of Polar Semiconductors
Flatté	
Fu	<ul style="list-style-type: none"> • Wesley Steiner – Testing and Installing a New Spectrograph on VAO • Sam Ponnada – Photoionization Modeling of Halo Gas Around Massive Galaxies
Gayley	
Goree	
Halekas	<ul style="list-style-type: none"> • Alexis Leali – Analysis of Reflected Ions from the Moon • Melissa Peters – Electron Cyclotron Harmonic Waves at the Moon
Hoadley	
Howes	
Jaynes	<ul style="list-style-type: none"> • Colin Ferreira – 3D Printed Magnetosphere • Kawther Rouabhi – Machine Learning Algorithm for Identification of Pulsating Aurora • Julianna Karl – Image Analysis of Pulsating Aurora
Kaaret	<ul style="list-style-type: none"> • Emily Silich - A HaloSat Search for 3.5 keV X-Rays from Sterile Neutrinos • Tyler Roth – CMOS Sensors for X-Ray Detection • Steven Tammes – CMOS Sensors for X-Ray Detection • Brandon Stephanie - CMOS Sensors for Earth Observation
Kletzing	<ul style="list-style-type: none"> • Ryan Helland – TRACERS Magnetic Search Coil • Andrew Schmitt - TRACERS Mechanical Engineering
Lang	
Mallik	
Meurice	
Miles	<ul style="list-style-type: none"> • Maxwell Bernstein – Comparing Inferred Field-Aligned Current to Auroral Intensity • Damion Johnson – MAGnetometers for Innovation and Capability (MAGIC) and the BLAZE Non-Magnetic Nanosatellite Magnetometer Boom • Alex Hoffman – MAGnetometers for Innovation and Capability (MAGIC) and the CHIMERA Hybrid Magnetometer • Cole Dorman – Magnetic Screening Apparatus for the MAGnetometers for Innovation and Capability (MAGIC) Project • Allison Flores – BLAZE Non-Magnetic Nanosatellite Magnetometer Boom • Ryan Helland - MAGnetometers for Innovation and Capability (MAGIC) • Andrew Schmitt - MAGnetometers for Innovation and Capability (MAGIC)
Nachtman	
Onel	

Polyzou	
Prineas	
Pryor	
Reno	
Rodgers	<ul style="list-style-type: none">• <u>Salvatore Quaid</u> – Projective Black Holes• <u>Patrick Vecera</u> – Thomas Whitehead Gravity
Scudder	
Skiff	<ul style="list-style-type: none">• <u>Ace White</u> – Plasma Spectroscopy in a ECR Double-Resonance Plasma Source
Uppu	
Wohlgenannt	