**Undergraduate Research Projects AY18-19**

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| **Faculty Name** | **Student Name and Project** |
| Baalrud |  |
| DeRoo | * Eric Jones – Updating a Metrology Facility for X-ray Optics
* Jared Termini – Building a Laboratory X-ray Beamline
 |
| Flatté |  |
| Fu | * Jacob Isbell – The Evolution of Molecular Gas Fraction Traced by the CO Tully-Fisher Relation (Isbell, Xue, & Fu 2018 ApJ Letter [869 37](http://adsabs.harvard.edu/abs/2018ApJ...869L..37I))
 |
| Gayley |  |
| Goree |  |
| Gurnett | * Jason Granroth – Cassini data processing support for George Hospodarsky's research studies
* Joshua Kamp – Mars Express data processing support for research staff data analysis studies (supervised by Andy Kopf)
* Xinyu Mai – Mars Express data processing support for research staff data analysis studies (supervised by Andy Kopf)
* Daniel Reinart – Mars Express data processing support for research staff data analysis studies (supervised by Andy Kopf)
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| Halekas | * Jacob Cowsky – High Voltage Power Supply Design for the ICI-5 Sounding Rocket
* Brandon Garcia – High Voltage Power Supply Design for the ICI-5 Sounding Rocket
* Michael Kistler – The Moon in the Terrestrial Magnetotail
* Dani Lipman – The Martian Bow Shock
 |
| Howes |  |
| Jaynes | * Collin Kolars – Identification of pulsating aurora using machine learning techniques
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| Kaaret | * William Fuelberth – HaloSat – A CubeSat to Study the Hot Galactic Halo
* Hannah Gulick – HaloSat – A CubeSat to Study the Hot Galactic Halo
* Sam Ponnada – Metallicity Effects on High Mass X-ray Binary Formation
* Emily Silich – A Hard X-ray Photoelectric Polarimeter
* Calvin Whitaker – HaloSat – A CubeSat to Study the Hot Galactic Halo
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| Kirchner | * Benjamin Atzen –
* Christian Brauns –
* Zachary Luppen –
 |
| Kleiber |  |
| Kletzing |  |
| Lang | * Hailey Moore –
 |
| Mallik |  |
| Merlino |  |
| Meurice |  |
| Miles | * Maxwell Bernstein – Comparing inferred field-aligned current to auroral intensity
* Jesslyn Coghlan – CubeSat Articulated Boom Option Optimization in Microgravity (CABOOM)
* Samuel Hisel – CubeSat Articulated Boom Option Optimization in Microgravity (CABOOM)
* Sean Lansing – CubeSat Articulated Boom Option Optimization in Microgravity (CABOOM)
* Joshua Larson – Miniature fluxgate magnetometer for the INSPIRESat-3 CubeSat
* Anvay Pradhan – Process furnace for low-noise fluxgate magnetometer cores
* Suman Sherwani – ICI-5 Suborbital Sounding Rocket
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| Mutel | * Xinyu Mai – Exoplanet detections in short-period binary stars using eclipse timing modeling
* Christopher Michael – Development of a high-resolution H-aplha spectrometer for the Iowa Robotic Telescope
* Tyler Roth – Multi-color photometric monitoring of ASASSN Supernovae
* Jillian Shenck – Multi-color photometric monitoring of ASASSN Supernovae
* Shu Song – Exoplanet detections in short-period binary stars using eclipse timing modeling
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| Nachtman | * Thomas McDowell – Electronics design and construction of project which looks for glueballs in the CMA data.
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| Onel | * Collin Kolars – GEANT MC Development for a Generic Calorimetry in HEP
* Cory Rude – Coding development for the CMS outer tracker (OT) gantry
* Jeffrey Schnell – CMS New QIE-10 Boards and design of the housing for several PMT types
 |
| Polyzou |  |
| Prineas | * Andrew Muellerleile – EQE Measurements in Mid-Infrared Superlattice Structures
 |
| Pryor |  |
| Reno |  |
| Rodgers |  |
| Scudder |  |
| Skiff |  |
| Smirl |  |
| Spangler |  |
| Wohlgenannt |  |