

# PHYSICS DEPARTMENT'S UNDERGRADUATE STEM RESEARCH SEMINAR SERIES: SPRING 2019

Fridays @ 3 pm (snacks at 2:30 pm) in Bruner 119

FEB. 15<sup>st</sup> Students for the Exploration and Development of Space, TTU Chapter  
**High-Powered Rocketry at Tennessee Tech**

FEB. 22<sup>nd</sup> Audrey Pattat, UT Martin  
**Assessing post-Miocene tilting of the Southern High Plains through paleoslope reconstructions of the Ogallala Formation**

MAR. 1<sup>st</sup> Damien DeArmitt, TTU Physics Major  
**Material Depolarization of Ultracold Neutrons**

MAR. 15<sup>th</sup> Dylan Gardner, TTU Chemistry  
**An Error Analysis of Relative Stereochemistry determinations via Residual Dipolar Coupling NMR**

MAR. 22<sup>nd</sup> Cole Howell, TTU Physics and Joseph Owens, TTU Electrical Engineering  
**NEXT: Detector  
NEXT Detector Signal Amplification**

MAR. 29<sup>th</sup> Dr. Sean Finch, Duke University and Triangle Universities Nuclear Laboratory  
**Measurements of Fission Product Yields**

APR. 5<sup>th</sup> Valerie Jones, TTU Wildlife and Fisheries  
**Distribution and abundance of the bluemask darter (*Etheostoma akatulo*) in the Collins River during summer 2018 (with an introduction to endangered species)**

Apr. 11<sup>th</sup> Dr. Peter Geltenbort, Institut Laue Langevin, Grenoble, France  
**Fundamental Neutron Physics at the ILL** *Special Time: Thursday, 11am, Bruner 119*

Apr. 19<sup>th</sup> Darsh Dinger, TTU Physics and Jeremiah Ginder, TTU Computer Science  
**Development of a CMOS Position-Sensitive UCN Detector  
Semiclassical Simulation of Spin Evolution in the UCN $\tau$  Experiment**

Apr. 26<sup>th</sup> Senior Physics Research Presentations  
**Sam Hall, Dezrick Howard, Benjamin Luna, Di'Arra Mostella**