



Undergraduate Research Fall Poster Presentations

Friday, December 1, 2017

10:30-12:00pm

Sill Center Large Conference Room

POSTER 1

Matthew Dutson (Douglas Bergman)

Department of Physics & Astronomy

RECONSTRUCTION OF COSMIC RAY GEOMETRY USING CHERENKOV BACKSCATTERING

In the past, monocular observations of cosmic ray cascades have relied on time profile fitting to determine geometry. Using Monte Carlo simulations, we investigate an alternate approach which uses the ground reflectance point of Cherenkov radiation as a fixed point along the shower track.

POSTER 2

Bria Hassett (Lindsay Gezinski)

College of Social Work

EXPERIENCES OF WOMEN AND THIRD-PARTY REPRODUCTION

This research focuses on the experience of women in Utah who have used or are using third-party reproduction due to infertility. The purpose of this study is to gain more information on why women choose third-party reproduction, how their view of motherhood is influenced by surrounding culture, and the support they need throughout the process.

POSTER 3

Stefan Kapetanovic (Rajesh Menon)

Department of Electrical and Computer Engineering

NON-ANTHROPOMORPHIC DEEP LEARNING: DEVELOPING THE "EYES FOR THE INTERNET OF THINGS"

Applying machine learning and deep learning upon CMOS sensor data of hand written numbers. Generating a system to understand numbers and thus transition to comprehend the environment they are subjected to.

POSTER 4

Nicole Lee (Akiko Kamimura)

Department of Sociology

HEALTH OF REFUGEES IN THE UNITED STATES

We researched the health of refugees in the United States. We explored the health behaviors, such as physical activity, diet, and factors influencing their health.

POSTER 5

Ian Schwenker-Punnett (Jennifer Follstad-Shah)

Department of Atmospheric Sciences

INTERACTION BETWEEN TEMPERATURE AND NUTRIENT ENRICHMENT ON LEAF LITTER BREAKDOWN

In freshwater-stream ecosystems, an increase in temperature is expected to correlate with an increase in the breakdown of organic matter, which for the purpose of this study, was leaf litter. In addition, an increase in nutrient availability is also expected to correlate with an increase in breakdown rate. This focuses specifically the possibility of an interaction between increased temperature and increased nutrients.

POSTER 6

Marissa Trujillo (Wayne Potts)

Department of Biology

SEX-BIASED RECIPROCAL VIRULENCE AND TRANSMISSION DYNAMICS DUE TO FRIEND VIRUS IN MICE

Historically, biomedical research involves using only one sex in animal studies. Doing research in such a way potentially inhibits our understanding of the effects seen in one sex and may lead to a complete misunderstanding of effects in the other sex. In order to avoid such oversights, we have developed a unique system that demonstrates how a viral pathogen transmits and causes virulence differentially in each sex.