Physics Department

POSTER SESSION

10:00 am to 12:00pm Olin Hall 208 and Olin Hall 211

Analysis of TOPTICA TeraScan System in the Terahertz Domain

Eric Stegehuis

Advisor: Douglas Petkie

A PER Aligned Nuclear Physics Experiment for IPL

Tristen Davis

Advisors: David Medich, Thomas Noviello

Covariant Integral Quantization of the L^2(S^2) Sphere

Rahul Sunil

Advisor: Romain Murenzi

Development of a Radiation Safety Training Program for Academic Research Laboratories

Nicole Allraum

Advisor: David Medich

Development of a Low Attenuation Fusion Target Cooler

Corbin Narita-PH, Camille Gipson-ME

Advisor: William McCarthy

Difference in Impact of Ungrading by Gender

Jake Maglio

Advisor: Thomas Noviello

Dynamics of Active Fluids in Lid-Driven Cavity Flow Systems

Tianxing Weng

Advisor: Kun-Ta Wu, Robert Pelcovits (Brown University), Thomas Powers (Brown University) Sponsor: National Science Foundation (CBET-

2045621)

Effective Monitoring and Optimizing of a Desktop CNC Mill

Echo Baumer-PH, ME; Raeael Caballero-ME; James Carroll-ME; Camren Chraplak-RBE, CS; Michael Doucette-ME; Perrin Kristff-ECE; Andrew Petro-ME; Daniel Petro-ME; Michael Primavera-RBE/JR Thaiprayoon-ME; Dante Uccello-ME

Advisors: Pradeep Radhakrishnan-ME, Snehalata

Kadam-PH, Joshue Cuneo-CS

Enabling High Dose Brachytherapy with Tungsten-181

Lucy Adams

Advisor: David Medich

Enhancing Physics Education in Underrepresented Communities with a Math-Centered Pedagogical Approach

Michael Nixdorf

Advisor: Thomas Noviello

Magnetic Imaging of Current Flow using Quantum Sensors

Sona Hanslia, Camille Williams

Advisor: Raisa Trubko

Shear Stress Sensing of Cancer Cells

Ezra Yohay

Advisor: Qi Wen

Sponsor: UMass Chan Medical School, Department

of Neurobiology

Terahertz Spectroscopy for Material Characterization

Abigail Johnson

Advisor: Douglas Petkie

UP! Sustainable Vertical Expansion for Enhanced Campus Utilization

Dimitris Graikos

Advisors: Izabela Stroe, Steven Van Dessel - CEAE