

Physics Department

Olin Hall 107

9:30am

STEM Education Research: Impacts of Ungrading

Mike MacGregor

Advisor: Ben Pollard

9:45am

WPI Hybrid Power/Research Reactor: Developing the Facilities to Perform Small Angle Neutron Scattering

Clark Apuy, Aaron Demers

Advisor: David Medich

10:00am

Feasibility of Using a PIPs Detector for Neutron Detection

Nicole Dombrowski (MA)

Advisor: David Medich, Marcel Blais (MA)

10:15am

Spectroscopy of Cosmological Molecules

Amy Welch

Advisor: Douglas Petkie

10:30am Break

10:45am

Laboratory Spectroscopy of Glycolaldehyde for Interstellar Applications

Mara Decesare, Alex Kiely

Advisor: Douglas Petkie

11:00am

Microwave Photonic Integrated Circuit Characterization

Nathaniel Gamboa, Thomas Emrick (MME)

Advisor: Douglas Petkie

12:30pm

Adapting Taylor Dispersion to Microfluidics Scale

Geneva Isaacson

Advisor: Francesca Bernardi (MA)

12:45pm

Modeling Diffusion in Microchannels with Dead-End Pores

Spencer Francis

Advisor: Francesca Bernardi (MA)

1:00pm

Intro to Acoustics Course Development

Rhys Forster

Advisor: Joe Stabile (MME), Rudra Kafle

1:15pm

Black Hole and Quantum Heat Engines

Maxwell Dargie

Advisor: Padmanabhan Aravind

1:30pm

Effects of Physical Confinement on Cancer Cell Mechanics

Mason Miguel

Advisor: Qi Wen

1:45pm

Quantum Sensing of Magnetic Biomaterials

Camille McDonnell

Advisor: Raisa Trubko

2:00pm

High Frequency Moisture Detection for Pulp and Paper Applications

Sahana Venkatesh

Advisor: Douglas Petkie