

Session Program

30 January 2024 to 29 February 2024

*APS-UH and the UH Department of Physics
present...*

Physics Research Day

Saturday, Feb. 24
8am - 5pm
Farish Hall



UH Physics Research Day - 2024

Parallel Session 2

University of Houston - Main Campus
101 Farish Hall

Tuesday 30 January

13:00

Parallel Session 2

Session | **Location:** University of Houston - Main Campus, 101 Farish Hall | **Conveners:** Rene Bellwied, Claudia Ratti

13:00-13:15

Centrality Measures for Directed Signed Networks

Speaker

Atrayee Sarkar

13:15-13:30

Extreme Value Statistics of Community Detection in Complex Networks with Reduced Network Extremal Ensemble Learning (RenEEL)

Speaker

TANIA GHOSH

13:30-13:45

Conventional superconductivity at the surface of a Type-I Weyl Semimetal

Speaker

Aymen Nomani

13:45-14:00

Machine Learning to Identify Gene Structure

Speaker

Ethan Speakman

14:00-14:15

Vortical effects in chiral band structures

Speaker

Swadeepan Nanda

14:15-14:30

Proton Exchange Membrane for Fuel Cell and Water Electrolysis Application

Speaker

Subash Bhandari

14:30-14:45

The significantly distinct performance of thermoelectric AMg_2Sb_2 ($A = Ca, Sr, Sm, Yb, \text{ and } Mg$)

Speaker

Xin Shi

14:45-15:00

Quantum Transport of Charge Density Waves

Speaker

Mr Johnathan Sanderson

15:00-15:15

Spectroscopic Determination of Electronic and Magnetic key energy scales of Chromium Trihalides

Speaker

Chamini Pathiraja

15:15