



**College of Natural Sciences  
& Mathematics**  
UNIVERSITY OF DENVER

## **Physics & Astronomy Colloquium**

**October 9, 4:00pm, Olin 105**



### **Dr. Sam Molnar**

Research Scientist, Computational Science Center  
National Renewable Energy Laboratory (NREL)

#### **A Scientific Journey: From Power Grid Dynamics to Visualization for Decision-Making**

Sam is a research scientist in the Computational Science Center at the National Renewable Energy Lab (NREL) in Golden, CO. Their current research focuses on novel data analysis, machine learning, and visualization techniques that enable actionable insights for diverse stakeholders to make decisions with scientific data. Prior to joining NREL, they received their PhD in Computer Science at the University of Colorado Boulder in 2021, where they developed analytical metrics to characterize power grid dynamics relevant to the integration of renewable generation. In this talk, they will discuss their journey in science, starting with their Bachelor's degree in Physics from DU, and present the diverse range of scientific problems they have studied throughout.