Old Dominion University
Data Science Colloquium

Tuesday, May 7, 2024

Brandon T. Kriesten
Argonne National Laboratory

Time: 11:35 am
Venue: hybrid, in-person Monarch Hall 1113AB, or
Zoom Link: https://odu.zoom.us/j/95625502633?pwd=WnN4MTR4Tlk5RUQ4NHF1bmpGSUIvQT09
Meeting ID: 956 2550 2633
Passcode: 241147

Abstract:

As a postdoctoral associate of Argonne National Laboratory (2023 - present) and previously as a postdoctoral associate of the Center for Nuclear Femtography at the Thomas Jefferson National Laboratory (2021 - 2023), my research has been at the forefront of the intersections between cutting edge machine learning techniques and high energy particle physics (HEP) and nuclear physics (NP) theory. My research aspiration is to combine leading innovation in machine learning with novel high energy physics theory to map out the underlying theory of quantum chromodynamics (QCD) and decorrelate/identify beyond standard model (BSM) contaminations. Critical to this effort is interfacing with lattice QCD calculations; in particular identifying how to pinpoint high-impact calculations from the lattice on phenomenological fits of quantum correlation functions. My interdisciplinary work on machine learning based global fits of (generalized) parton distribution functions from (deeply virtual Compton scattering) deep inelastic scattering data make me a unique candidate to contribute to the rich academic environment in the Old Dominion University data science group.

All interested persons are cordially invited to attend.