

Boost Physics Analysis at BESIII with Deep Learning

This talk will focus on the application of Deep Learning, specifically Graph Neural Networks (GNNs), in physics analysis at BESIII. It will explore their effectiveness in studying Λ_c semileptonic decays and hadronic decays, leveraging the power of GNNs to analyze data with complex relational structures. We will also try to discuss the systematic uncertainty treatment, which is still an open question in experimental particle physics. Finally, this talk also showcases the promise of GNNs in advancing physics analysis at both BESIII and future collider experiments.

I am

student/postdoc

Primary author: LI, Yangu (Peking University)

Presenter: LI, Yangu (Peking University)

Track Classification: Machine Learning