

Refined Simulations of Double Pion Electroproduction for CLAS22

Wednesday, 11 December 2024 11:20 (15 minutes)

This presentation covers recent advancements in the refined simulations of double pion electroproduction for CLAS22. Double pion production provides a valuable probe of baryon structure, requiring accurate simulations for proper interpretation of experimental data. The presentation addresses the feasibility of extending the kinematic coverage beyond CLAS12, discussing resolution and acceptance in terms of detector coverage and reconstructed simulation. Sufficient resolution is necessary for precise identification and isolation of exclusive and missing particle (proton, π^+ , and π^-) topologies. These simulations aid in current data analyses and provide a foundation for future experiments with CLAS22 at Jefferson Lab, ultimately leading to a deeper understanding of the baryon structure.

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Session Classification: Spatial Structure, Mechanical Properties, and Emergent Hadron Mass