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Comparison of Kaon distributions in data and MC for CLAS12[1]

MICHAEL VELTRE, Duquesne University, HARUT AVAKIAN, Jefferson Lab, FATIHA BENMOKHTAR[2], Duquesne University — **Abstract:**
It is well known that protons and neutrons are made from constituents called quarks and gluons, which give substructure to these particles. The goal of this project is to make measurements of the transverse momentum distributions of the quarks that provide a three-dimensional map of quarks in the nuclear medium. This knowledge provides the basis of our understanding of protons and neutrons in terms of the dynamics of their internal constituents. This abstract focuses on the study of strange meson production providing access to strange quark distributions and hadronization. This is feasible with semi-inclusive deep inelastic scattering of electrons off proton and deuteron targets in Hall B at Jefferson Lab. I will be presenting my analysis of Kaons resulting from these SIDIS data and compare the results to a full Monte-Carlo simulation. I will be mainly focusing on Kaon's momentum and angular distributions.

[1]NSF 1615067 and SULI Jefferson lab
[2]This abstract is for CEU poster

Fatiha Benmokhtar
Duquesne University

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