

Abstract Submitted
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Kaons Identification of Charm-Quark-Initiated Jets Using the Proposed ATHENA Detector at the Electron-Ion Collider¹ STEPHANIE GILCHRIST, Southern Methodist University, ATHENA COLLABORATION — The electron-ion collider (EIC) is a proposed particle collider at Brookhaven National Laboratory that will provide new opportunities for precision studies of protons, neutrons, and nuclei. At least one experiment will operate at the EIC. One proposal under development is the ATHENA proto-experiment (A Totally Hermetic Electron-Nucleus Apparatus). We are interested in using the EIC and ATHENA to study the strange quark content of the proton. I will discuss the work I have done to identify charm quark jets, induced from strange quarks. The work focuses on using single kaons to identify jets. Simulation results I obtained will be shown in the context of the baseline model for the ATHENA detector.

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