

Abstract Submitted
for the DNP08 Meeting of
The American Physical Society

A measurement of the nuclear dependence of hadronization of neutral kaons¹ AJI DANIEL, Ohio University, CLAS COLLABORATION — Understanding the confinement of quarks and gluons in hadrons is one of the great challenges in hadronic physics. Semi-inclusive measurements of deep inelastic electron scattering from nuclei provide a unique testing ground to study the process of hadron formation. The space-time features and the nuclear dependence of quark propagation and hadronization can be extracted by comparing the production of various hadronic species from a number of target nuclei under different kinematic conditions. I will present preliminary results on the multiplicity ratios of K_s^0 as a function of $z(= \frac{E_h}{\nu})$ and P_T^2 from Jefferson Lab experiment E02-104. The CLAS large acceptance detector, with an electron beam of energy 5 GeV, was used to study the nuclear dependence of neutral kaon production. Data on multiplicity ratios of hadrons with strangeness will provide further input for theories of hadronization, inspired by dynamical models of QCD.

¹Work supported in part by NSF PHY-0653454.

Aji Daniel
Ohio University

Date submitted: 30 Jun 2008

Electronic form version 1.4