Abstract Submitted for the DNP13 Meeting of The American Physical Society

Ratios of hadronic continuum spectra to deuterium R.J. PETER-SON, Department of Physics University of Colorado Boulder — The role of shortrange correlations among nucleons in complex nuclei was recently demonstrated with 5.766 GeV electrons by plotting ratios of inclusive doubly-differential cross sections from nuclei to the same for deuterium, with a sharp rise noted for Bjorken x > 1[N. Fomin et al. Phys. Rev. Lett. **108**, 092502(2012)]. A similar set of data for scattering of hadrons, both with and without charge exchange, has been put into such ratio form for lower beam energies and momentum transfers q. For q near 500 MeV/c the data ratios rise with x for several nuclei and beams, but less strongly than the recent electron data. When a large range of hadronic ratios to deuterium are plotted on a length scale set by 1/Q, the four-momentum transfer, a smooth trend is found, joining the electron ratio data at large Q.

> R.J. Peterson Department of Physics University of Colorado Boulder

Date submitted: 28 Jun 2013

Electronic form version 1.4