Abstract Submitted
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Scaling Relations for Hadronic Spectra from Carbon[1] R.J. PETERSON, University of Colorado — Scaling relations have been widely used to compare inclusive electron scattering spectra from complex nuclei, based upon a quasifree assumption and a range of detailed methods. These same methods may be applied to inclusive continuum hadron spectra at suitable beam energies and angles. All such schemes have now been used to compare all suitable hadron scattering spectra for the single example of carbon, including proton, pion and K+ quasifree data. Results will be shown for a scaling system based upon the ideas of a relativistic Fermi gas, using off-shell, in-medium, resonance-averaged hadron- nucleon methods. It will be shown these methods yield very similar responses for all beam probes and a wide range of momentum transfers, at beam energies from 392 to 1014 MeV, for energy losses less than for free scattering. A comparison will be made to experimental and theoretical methods successful for electron scattering.

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