Abstract Submitted
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Flavor dependence of the EMC effect[1] JOHN ARRINGTON, Argonne Natl Lab — The 6 GeV program at Jefferson Lab has provided significant new insight into the EMC effect - the modification of quark distributions in nuclei compared to nucleons. These data have overturned the traditional assumptions of a density-dependent rescaling of the quark distributions, showing instead a connection to the detailed nuclear structure of the target nucleus. These results, as well as QCD-based calculations, also suggest significant flavor dependence to the EMC effect. I will show estimates of the potential size of such flavor dependence and discuss plans to isolate the up- and down-quark contributions to the EMC effect, in particular through the use of parity-violating electron scattering from nuclei.

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