

Abstract Submitted  
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**Nuclear shadowing at small Bjorken-x from diffractive scattering<sup>1</sup>**

ADEOLA ADELUYI, GEORGE FAI, Kent State University — We calculate the nuclear shadowing ratio at small Bjorken-x for nuclei in the mass range  $4 \leq A \leq 240$ . We work in the kinematic regime relevant to small-x shadowing data of both the NMC and E665 experiments. The diffractive dissociation cross section, which is an input to our calculation, is parameterized separating the low-mass resonances and the high-mass continuum, following the H1 collaboration [1], using data from FNAL [2]. Our calculated results are in reasonable agreement with the NMC/E665 data at  $x \approx 10^{-4}$ , indicating the applicability of generalized Gribov theory.

1. C. Adloff *et al.* [H1 Collaboration], *Z. Phys. C* **74**, 221 (1997).
2. T.J. Chapin *et al.*, *Phys. Rev. D* **31**, 17 (1995).

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