

Abstract Submitted
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Perturbative and non-perturbative contributions to light flavor asymmetry in the proton sea¹ MARY ALBERG, Seattle University, University of Washington, TYLER MATOSSIAN, Seattle University, University of Southern California — We consider both perturbative and non-perturbative contributions to the Bjorken- x dependence of the \bar{d} and \bar{u} distributions in the proton sea. The non-perturbative contribution is described by a meson cloud model which includes a Fock state expansion of the proton in terms of meson-baryon pairs. The perturbative contribution is described by a statistical model which uses Fock states of quarks, antiquarks and gluons to represent the parton distributions of the “bare” hadrons in the meson cloud. We compare our results to the E866 data for $\bar{d}(x) - \bar{u}(x)$ and $\bar{d}(x)/\bar{u}(x)$.

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