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Phenomenology of light hadrons in a chiral effective theory¹ TIMOTHY HOBBS, JOHN LONDERGAN, Indiana University, CHUENG-RYONG JI, North Carolina State University, WALLY MELNITCHOUK, Jefferson Lab — We present the results of a recent calculation of the pion production cross section as might be determined in proposed Jefferson Lab measurements involving spectator tagging in single-inclusive proton electroproduction on a fixed neutron target. Estimates are computed assuming the Sullivan process as the dominant mechanism, and chiral effective Lagrangians provide a description of the relevant hadronic interactions. We also assess the role of the Δ isobar in generating the light quark sea asymmetry using χ -PT.

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