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Probing the Isospin Dependence of Short-range Correlations in A=3 Nuclei¹

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The nucleon-nucleon correlations at short ranges generate high-momentum nucleons in nuclei. Previous exclusive scattering experiments observed the neutron-proton pair (isospin singlet) dominance in high-momentum nucleons. This np dominance causes a scaling behavior inclusive cross sections at the xbj;1 quasielastic tail. At Jefferson Lab Hall A we checked this np dominance of SRC via the electron scattering on A=3 nuclei system. The 3H to 3He inclusive cross section at xbj;1 were measured at 0.4 ; Q2 ; 3 GeV²intwoexperiments(E12 - 11 - 112andE12 - 14 - 011). Absolute cross sections were extracted. The fraction of nppairs amonghigh momentum nucleons in the A = 3 system was determined from the 3H to 3H ecross section ratio at xbj > 1.

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