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Studies of Proton Momentum Distribution in ⁴He FATIHA BENMOKHTAR, Duquesne University — Experimental cross sections for the ⁴He(e,e'p)X reaction up to a missing momentum of 0.632 GeV/*c* at $x_B = 1.24$ and $Q^2 = 2 (\text{GeV}/c)^2$ will be presented. The data are compared to Relativistic Distorted Wave Impulse Approximation (RDWIA) calculations for ⁴He(e,e'p)³H channel. Significantly more events in the triton mass region are measured for $p_m > 0.45 \text{ GeV}/c$ than are predicted by the theoretical model, suggesting that the effects of initialstate multi-nucleon correlations are stronger than expected by the RDWIA model.

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