

Abstract Submitted
for the DNP11 Meeting of
The American Physical Society

Study of the ${}^4\text{He}(e, e'p)$ reaction up to high missing momenta and energies. Search for N-N Short Range Correlations¹ FATIHA BEN-MOKHTAR, Christopher Newport University — The ${}^4\text{He}(e, e'p)$ reaction has been recently measured up to high missing momenta and missing energies; p_m of 1 GeV/c and E_m of 200 MeV, respectively, in Hall A of Jefferson Lab., part of a rich short range correlation experimental program. The continuum region is under study in order to investigate high-nucleon-momenta components in the ${}^4\text{He}$ wave function with the absorption of virtual photons on nucleons correlated in pairs in the ${}^4\text{He}$ ground state. The measurements were performed at $x_B = 1.25$ and at a fixed transferred four-momentum $Q^2 = 2(\text{GeV}/c)^2$. Physics goals will be discussed and analysis status and strategy will be presented.

¹For the Jefferson Lab Hall-A Collaboration

Fatiha Benmokhtar
Christopher Newport University

Date submitted: 01 Jul 2011

Electronic form version 1.4