

Abstract Submitted  
for the DNP10 Meeting of  
The American Physical Society

**Understanding  $^3\text{He}$  Nuclei via Quasi-elastic  $^3\text{He}(e,e'd)$  and  $^3\text{He}(e,e'p)$  Asymmetry Measurements** VINCENT SULKOSKY, Massachusetts Institute of Technology, JEFFERSON LAB HALL A COLLABORATION — Two-body calculations using realistic wave-functions predicted that the  $D(e,e'p)$  asymmetry varies strongly as a function of missing momentum. This prediction has been tested in quasi-elastic  $D(e,e'p)n$  experiments in which the predicted sign change of the asymmetry has been observed when the missing momentum is larger than the Fermi momentum. The  $^3\text{He}(\vec{e},e'p)$  and  $^3\text{He}(\vec{e},e'd)$  reaction channels have also been calculated using state-of-the-art Faddeev calculations, and the results indicate that the asymmetry as a function of missing momentum is likewise sensitive to the initial-state wave-function. For Jefferson Lab experiment E05-102, we measured the double spin asymmetries  $A_x$  and  $A_z$  in the range of recoil momenta from 0 to  $\sim 200$  MeV/c for the quasi-elastic and  $x > 1$   $^3\text{He}(\vec{e},e'p)$  and  $^3\text{He}(\vec{e},e'd)$  channels. An overview of experiment will be discussed including an update on the analysis progress.

Vincent Sulkosky  
MIT

Date submitted: 01 Jul 2010

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