

Abstract Submitted
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Understanding the Three-Body System via Quasi-Elastic Electron Scattering GE JIN, University of Virginia, JEFFERSON LAB HALL A COLLABORATION — Understanding the dynamics of the ^3He system is crucial for nuclear physics experiments that wish to use ^3He as an effective neutron target: such as for the extraction of the neutron's electric form factor. Within theoretical models, the percentage of the S, S' and D states in the ^3He ground-state wave-function can be calculated and have been shown to be sensitive to observable double-spin asymmetries. Jefferson Lab experiment E05-102 measured the polarized-target and polarized beam asymmetries in the quasi-elastic $^3\text{He}(e,e')$, $^3\text{He}(e,e'p)$, $^3\text{He}(e,e'd)$ and $^3\text{He}(e,e'n)$ channels. An overview experiment will be discussed and preliminary $(e,e'p)$ asymmetries as a function of missing momentum will be presented.

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