## Abstract Submitted for the OSS09 Meeting of The American Physical Society

Electron Scattering from the Deuteron at GeV Energies<sup>1</sup> SABINE JESCHONNEK, The Ohio State University at Lima, J.W. VAN ORDEN, Old Dominion U./Jefferson Lab — Currently, several data sets on D(e,e'p)n reactions, taken at Jefferson Lab, are analyzed or have been published recently. A solid theoretical description is necessary in order to understand these data and extract all possible information, both on the reaction mechanism and the nuclear ground state. A new calculation with full, spin-dependent final state interactions and a relativistic wave function is presented. We will discuss the sensitivity of various observables to the employed parametrization of the nucleon-nucleon scattering amplitude in the final state, as well as to the D-wave content of the ground state. We investigate several observables, including asymmetries for target polarization.

<sup>1</sup>This work is supported in part by NSF grant PHY-0653312, and by DOE grant DE-AC05-84ER40150.

Sabine Jeschonnek The Ohio State University at Lima

Date submitted: 01 Apr 2009 Electronic form version 1.4