## Abstract Submitted for the CAL10 Meeting of The American Physical Society

Hyperon Rescattering processes with CLAS¹ ALEC THOMPSON, JOHN PRICE, California State University, Dominguez Hills — The recent finding of a large production rate for the process  $\gamma p \to K^+ K^+ \Xi^-$  at JLab has opened up the possibility of using the produced  $\Xi^-$  as a tagged beam with which to study the  $\Xi^- p$  scattering process. This process should be related to the pp cross section by SU(3)<sub>F</sub> symmetry. It is important to the hypernuclear community, as one of the building blocks in the production of  $\Xi$ -enriched hypernuclear states, which is in turn important to the astrophysical community for its implications on the study of the behavior of nuclear matter at varying densities. Under the proper circumstances, the process  $\Xi^- p \to \Lambda\Lambda$  may be used to directly measure the parity of the ground-state  $\Xi$ , which has not yet been done. This talk will present the motivation behind this study, and the initial results of this study in  $\Lambda p$  scattering.

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