

Abstract Submitted  
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**Energy dependence of the parity-violating asymmetry of circularly polarized photons in  $d\vec{\gamma} \rightarrow np$  in pionless effective field theory** JARED VANASSE, Duke University, Ohio University, MATTHIAS SCHINDLER, University of South Carolina, Columbia — At low energies parity-violating interactions between nucleons are described by five low energy constants. The aim of hadronic parity-violation is to cleanly obtain these from experiment, for which few-body systems and pionless effective field theory are ideally suited. In this talk I will discuss the calculation of the parity violating asymmetry in the cross sections for circularly polarized photons on an unpolarized deuteron target in  $d\vec{\gamma} \rightarrow np$  using pionless effective field theory. Using this calculation with estimates for the parity-violating low energy constants I will show the ideal energy at which such an experiment should be performed. This experiment is of particular interest as it is a possible future experiment at an upgraded High Intensity Gamma-Ray Source at the Triangle Universities Nuclear Laboratory.

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