Abstract Submitted
for the NEF11 Meeting of
The American Physical Society

Hadronic Parity Violation JARED VANASSE, Department of Physics, University of Massachusetts Amherst — For 50 years the field of hadronic parity violation has been unresolved. Since the 1980's the standard theoretical framework for hadronic parity violation has been the DDH model. However, discrepancies between the DDH model and experiment have called the use of this model into question. At low energies a new model independent analysis of hadronic parity violation can be carried out via pionless effective field theory. With the use of pionless effective field theory and new precision experiments, focusing on systems with $A \leq 4$ in order to eliminate nuclear physics uncertainties, the field of hadronic parity violation at low energies will finally be understood. This talk will give an overview of the theory and possible future experiments in this old yet still exciting field.

Jared Vanasse
Department of Physics, University of Massachusetts Amherst

Date submitted: 20 Oct 2011 Electronic form version 1.4