Abstract Submitted
for the SES06 Meeting of
The American Physical Society

The NPDGamma Experiment: Hadronic Parity Violation in the Radiative Capture of Polarized Cold Neutrons on Protons[1] MICHAEL GERICKE, TJNAF/ U. of Manitoba, NPDGAMMA COLLABORATION — The NPDGamma experiment is currently taking data to measure the parity-violating correlation A_γ between the neutron spin and photon direction in the capture of polarized cold neutrons on hydrogen, to a precision 5×10^{-9}, 10% of the expected value. This asymmetry measures the neutral weak hadronic coupling without the complicating effects of nuclear structure. The first phase of the experiment, at Los Alamos National Laboratory, will provide an upper limit at the 10^{-7} accuracy and phase two is proposed to run as the first experiment on the new fundamental neutron physics beam line at the Spallation Neutron Source at Oak Ridge National Laboratory. An overview of the experiment and related physics will be provided, together with a preliminary analysis of the phase 1 data.

[1]DOE, NSF, NSERC.

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Date submitted: 21 Aug 2006 Electronic form version 1.4