

Abstract Submitted  
for the DNP12 Meeting of  
The American Physical Society

**First results from the NPDGamma Experiment at the Spallation Neutron Source** NADIA FOMIN, LANL, NPDGAMMA COLLABORATION — The NPDGamma experiment aims to measure the parity-odd correlation between the neutron spin and the direction of the emitted photon in cold neutron-proton capture. A parity violating asymmetry (to be measured to  $10^{-8}$ ) from this process can be directly related to the strength of the hadronic weak interaction between nucleons, specifically the  $\Delta I = 1$  contribution. As part of the commissioning runs on the Fundamental Neutron Physics beam line at the Spallation Neutron Source at ORNL, the gamma-ray asymmetries from the parity-violating capture of cold neutrons on  $^{35}\text{Cl}$  and  $^{27}\text{Al}$  were measured, to check for systematic effects, false asymmetries, and backgrounds. Early this year, the parahydrogen target for the production run of NPDGamma was commissioned. Results of commissioning measurements will be reviewed and first hydrogen data will be shown.

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Date submitted: 28 Jun 2012

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