

Abstract Submitted
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Polarized Cold Neutron Capture in ^{27}Al SEPTIMIU BALASCUTA, Arizona State University, NPDGAMMA COLLABORATION — The NPDGamma Experiment at the Spallation Neutron Source at ORNL is measuring the parity-odd correlation between the neutron spin and the direction of the emitted photon in the capture of cold neutrons on a 16-liter liquid parahydrogen target. The goal is to determine the strength of the weak nucleon-nucleon interaction. One of the main background contributions comes from the gamma rays produced by neutrons captured in the Al walls of the target vessel. To quantify this effect a commissioning experiment measured the parity-odd and parity-even asymmetries in the angular distribution of the gamma rays from the capture of polarized cold neutrons in a solid Al target. A status of the analysis of this experiment will be presented.

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