

Abstract Submitted
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Measurement of Parity Violation in Radiative Neutron Capture

MIKAYEL DABAGHYAN, University of New Hampshire, NPDGAMMA COLLABORATION — The NPDGamma experiment aims to measure parity violating directional gamma-ray asymmetry, A_γ in the $\bar{n} + p \rightarrow d + \gamma$ reaction using para-hydrogen, with sensitivity of 5×10^{-9} , 10% of its predicted value. The experiment is currently under commissioning at LANSCE at Los Alamos National Laboratory. We have measured A_γ in a series of elements with $35 \leq A \leq 59$ as well as B, Al, In and Cu. From the results we will extract the upper limit for the weak spreading width in hadronic weak interaction. Experiment and results will be presented.

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