

Abstract Submitted  
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**The NPDGamma Experiment at the SNS FnPB** CHRISTOPHER CRAWFORD, University of Kentucky, NPDGAMMA COLLABORATION — The NPDGamma experiment recently concluded a successful first phase data-taking run at LANSCE and is now moved to ORNL where it has been approved to run as the first experiment at the Fundamental Neutron Physics Beamline at the SNS. To accommodate the SNS beam and lessons learned at LANSCE, a number of changes have been proposed for the experiment. I will describe these improvements and upgrades, and the expected performance of the experiment to measure the parity-violating directional gamma asymmetry  $A_\gamma$  of the reaction  $n + p \rightarrow d + \gamma$  with an error of  $1 \times 10^{-8}$ .

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