

Abstract Submitted  
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**Systematics of the SNS n-3He Experiment**<sup>1</sup> CHRISTOPHER CRAWFORD, University of Kentucky, N-3HE COLLABORATION — The  $\bar{n} + {}^3\text{He} \rightarrow {}^3\text{H} + \text{p}$  reaction is sensitive to isospin zero components of the hadronic weak interaction, complementary to NPDGamma (isospin one). We are preparing an experiment to measure the PV proton asymmetry of this reaction at the SNS Fundamental Neutron Physics Beamline immediately following the NPDGamma experiment. Due to a large PC nuclear asymmetry, this experiment must be run with longitudinal neutron polarization, with the beam centerline, magnetic holding field, and detectors aligned. I will discuss our commissioning and run plan and measures to suppress all systematic effects well below our statistical sensitivity of  $10^{-8}$ .

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