

Abstract Submitted  
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**Characterization of Noise Sources in the n3He Parity Violating Asymmetry Measurement** MARK MCCREA, Univ of Kentucky, N3HE COLLABORATION — The goal of the n3He Experiment was to measure the parity-violating proton directional asymmetry relative to the initial neutron polarization in the reaction  $\bar{n} + {}^3\text{He} \rightarrow p + T + 765 \text{ keV}$  to a high precision. Data taking completed at the end of 2015 yielding a preliminary proton asymmetry of  $(1 \pm 1) \times 10^9$ . In addition to neutron counting statistics there are smaller contributions to the uncertainty in the final asymmetry due to electronics and other instrumental noise sources. I will present a characterization of this noise and algorithms to minimize its contribution to the uncertainty of the proton asymmetry.

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