

Abstract Submitted  
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**The Alpha-Gamma Program at NIST** EVAN ADAMEK<sup>1</sup>, University of Tennessee - Knoxville — The Alpha-Gamma device utilizes  $^{10}\text{B}(n,\alpha)$  capture on a totally absorbing deposit to measure the absolute neutron flux of a monochromatic cold neutron beam. This device has been successfully operated and used to improve the determination of the neutron flux for a neutron lifetime experiment. It is also being used for a measurement of the  $^6\text{Li}(n,t)^4\text{He}$  cross section. We shall present its principle of operation along with the current and planned projects involving the Alpha-Gamma device, including the recalibration of the U.S. national neutron standard NBS-1, a  $^{235}\text{U}$  cross section measurement, and the calibration of flux monitors for a new measurement of the neutron lifetime

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