## Abstract Submitted for the APR14 Meeting of The American Physical Society

Analysis of Systematic Errors in Experimental Measurements of Fundamental Symmetries with Polarized Neutrons JONATHAN SERPICO, IVAN NOVIKOV, Western Kentucky University — Measurements of the fundamental symmetries violation in nuclear reactions with polarized neutrons can provide valuable information on hadronic weak interaction. We have conducted an analysis of systematic sources of error in the measurement of symmetry violation effects due to neutron energy variations and depolarization in the beam. The neutron energy dependence of various observables was calculated in the framework of nuclear resonance reaction theory.

Jonathan Serpico Western Kentucky University

Date submitted: 10 Jan 2014 Electronic form version 1.4