APR15-2015-020012

Abstract for an Invited Paper for the APR15 Meeting of the American Physical Society

Manifestations of Symmetry Violation in Nuclei¹

WICK HAXTON, Univ of California - Berkeley and Lawrence Berkeley National Laboratory

Nuclei are remarkable laboratories for testing symmetries, frequently greatly enhancing small effects through energy degeneracies and other means, and often selecting out specific interactions through selection rules imposed by angular momentum, isospin, and energetics. Some of our most stringent tests of time reversal invariance, lepton number conservation, and parity come from experiments done on atomic nuclei. I summarized the status of several such tests, and describe some of the questions that remain unresolved.

¹This work was supported by the DOE Office of Science (Office of Nuclear Physics)