TESTS OF SYMMETRIES WITH NUCLEI

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Precision measurements in nuclear beta decay provide complementary sensitive means to study the foundations of the electroweak sector of the standard model and to search for new phenomena beyond. Recent progress in particle trapping techniques and in the production of intense beams of exotic nuclei have enable to reach new levels of sensitivity in the measurement of several correlation parameters and other decay properties. This talk will focus on the use of nuclei as laboratories for such precision measurements. The achievements in tests of maximal parity violation, time reversal invariance as well as in the searches of exotic interactions without specific space and time transformation properties will be reviewed and some ongoing projects will be discussed.

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