ISOSPIN SYMMETRY BREAKING IN THE MASS-32 SYSTEM AND THE STANDARD MODEL

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Our understanding of Nature at the fundamental level is based on the so called Standard Model of particle physics. Over the years, the Standard Model has been subjected to rigorous experimental tests and has emerged a triumphant victor. However, there is reason to believe that the theory is not complete and is part of a more profound (yet-to-be-discovered) theory that offers a complete, unified description of Nature. In this talk I shall give a brief description of nuclear physics contributions to tests of the Standard Model via high precision measurements. In particular, I shall focus on direct and ancillary measurements of isospin symmetry breaking in the mass 32 region that provide meaningful insight into present and future experiments in the search of “physics beyond the Standard Model”.