



Contribution ID: 2

Type: **Submitted**

Weak-interaction studies with radioactive nuclei

Friday 9 December 2016 12:15 (20 minutes)

Beta decay is a formidable laboratory for the study of weak interaction. These decays give today the most precise value of the V_{ud} quark-mixing matrix and competitive limits on physics beyond the standard model like scalar or tensor currents. In my talk, I will cover the present status of 0^+-0^+ and mirror beta decays to determine the V_{ud} matrix element and describe present and future activities to improve the quality and precision of these measurements. Measurements of angular correlation coefficients in nuclear beta decay allow for a determination of limits of scalar currents in Fermi beta decay and of tensor contributions in Gamow-Teller beta decay. The status of these measurements will be presented and future initiatives at ISOLDE described.

Author: BLANK, Bertram (CEN Bordeaux-Gradignan)

Presenter: BLANK, Bertram (CEN Bordeaux-Gradignan)

Session Classification: Fundamental Interactions & Results From Other Laboratories