"Correlation measurements in nuclear beta decay"

Precision measurements in nuclear beta decay provide a sensitive window to determine fundamental parameters of the standard electroweak model and enable searches for new physics in processes involving the lightest quarks.
The main aim of such measurements is to find deviations from standard model predictions for unambiguously calculated quantities as possible indications of new physics.

In this presentation I will discuss the sensitivity of correlation parameters in nuclear beta decay which are linear in the so-called exotic (scalar and tensor) couplings and describe an experiment which was carried out at NSCL in order to explore new alternative techniques for their measurements.