

# PRECISION MEASUREMENTS OF THE BETA-NEUTRINO ANGULAR CORRELATION IN GAMOW-TELLER DECAYS

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Precision measurements of the beta-neutrino angular correlation in nuclear beta decay provide sensitive means to search for possible exotic couplings contributing to the weak interaction, regardless of their space and time transformation properties. A new measurement of the beta-neutrino angular correlation in the pure Gamow-Teller decay of  ${}^6\text{He}$  has been carried out at GANIL with ions confined in a transparent Paul trap. In this discussion, I will first describe the status of this experiment, including recent measurements of ionization probabilities due to shake-off following beta-decay. I will then address an alternative indirect technique considered at NSCL to be applied to  ${}^8\text{He}$  decay, as a possible route to further improve experimental sensitivities in Gamow-Teller transitions.