

NEutrino Properties Through Use of Nuclei (NEPTUN)

Monday 1 July 2024 11:00 (45 minutes)

In my talk I will highlight the background and achievements, as also some prospects, of the NEPTUN (NEutrino Properties Through Use of Nuclei) project's first year. NEPTUN is a 3-year neutrino-related nuclear-physics project funded by the EU through the Romanian Ministry of Research, Innovation and Digitization. I will discuss the problem of the effective value of the weak axial-vector coupling g_A and ways to determine its value through β spectral shapes and the nuclear muon capture. I will also address the studies of total β spectral shapes related to quantification of natural radioactive backgrounds in rare-events and dark-matter experiments, as also the sterile neutrinos in the light of reactor antineutrino anomalies.

Author: SUHONEN, Jouni (CIFRA; University of Jyväskylä)

Presenter: SUHONEN, Jouni (CIFRA; University of Jyväskylä)

Session Classification: Morning session