

Latest results from the NEMO-3 and SuperNEMO experiments

Monday, May 22, 2017 2:36 PM (18 minutes)

Neutrinoless double-beta decay, if observed, would be proof that the neutrino is its own antiparticle, would be evidence for total lepton number violation, and could allow a measurement of the absolute neutrino mass. Tracking calorimeter experiments have particular strengths, including the ability to search for neutrinoless double-beta decay amongst several different isotopes hosted in source foils. Full event reconstruction provides powerful background rejection capability, and, in the event of a discovery, topological measurements are a powerful handle to determine the nature of the lepton number violating process. I will present the latest results from the NEMO-3 experiment together with the current status and future prospects for its successor: SuperNEMO.

Primary author: CASCELLA, Michele (U)

Presenter: CASCELLA, Michele (U)

Session Classification: R2-Neutrino Detectors(1)

Track Classification: Neutrino Detectors