PANIC2021 Conference



Contribution ID: 72

Type: Talk

CEvNS nuclear physics aspects

Sunday 5 September 2021 14:10 (20 minutes)

The recent observation of coherent elastic neutrino nucleus scattering (CEvNS) has opened new opportunities for investigating nuclear structure parameters and other electroweak probes. In this talk I will present the current status of constraints on the nuclear neutron rms radii of CsI and Argon, placed by the COHERENT data. I will also review the implications of advanced nuclear structure models, such as the deformed shell model and the quasiparticle random phase approximation (QRPA), on the interpretations of new physics signals with a special focus on electromagnetic neutrino interactions.

Primary author:Dr PAPOULIAS, Dimitrios (University of Ioannina)Presenter:Dr PAPOULIAS, Dimitrios (University of Ioannina)Session Classification:Neutrino physics

Track Classification: Neutrino physics