

Detecting Elastic Coherent Neutrino Scattering with RELICS Experiment

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The Coherent Elastic Neutrino-Nucleus Scattering (CEvNS) was predicted in 1974 but wasn't experimentally confirmed until 2017 due to its extremely low energy deposit, making detection challenging due to energy threshold and background levels. Liquid Xenon Time Projection Chambers (LXeTPCs) have shown excellence in dark matter searches and may serve as an ideal technology for detecting CEvNS. The RELICS experiment aims to utilize LXeTPC to detect reactor neutrinos via CEvNS. This report will cover the latest advancements in CEvNS detection.

Paper info

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