

Reactor neutrino liquid xenon coherent elastic scattering experiment (RELICS)

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The Coherent Elastic Neutrino-Nucleus Scattering (CEvNS) was predicted in 1974. Still, it wasn't experimentally confirmed until 2017 due to its shallow 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 be 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.

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