Conference on Science at the Sanford Underground Research Facility

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Baryon Number Violation Searches in DUNE

Thursday, May 12, 2022 2:40 PM (20 minutes)

The Deep Underground Neutrino Experiment (DUNE) is an international project that will study neutrinos and search for phenomena predicted by theories Beyond the Standard Model (BSM). DUNE will use a 70-kton liquid argon time projection chamber (LArTPC) located more than a kilometer underground. The excellent imaging capabilities of the LArTPC technology, in addition to the large size and underground location, allow the experiment to probe many types of rare processes. This talk will summarize DUNE's sensitivity to baryon number violating processes such as nucleon decay and neutron-antineutron oscillations.

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Track Classification: Proton Decay