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Prospects for the Nucleon Decay Search in the JUNO Experiment

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Nucleon Decay is one of the apparent consequences of Baryon Number Violation, as predicted in many Grand Unified Theories (GUTs). It could give an explanation to the asymmetry of matter and anti-matter in the universe. Many experiments have been constructed to search for the nucleon decays while no clues are found. Jiangmen Underground Neutrino Observatory (JUNO), with more than 40k PMTs around the 20 kton liquid scintillator detector, is expected to be sensitive to many of the predicted decay modes of nucleon. In this poster, prospects will be introduced based on our recent progresses on searching for the nucleon decays in JUNO.

In-person participation

No

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