

## Status of the JSNS2 experiment

*Tuesday, 4 June 2024 10:00 (30 minutes)*

The JSNS2 experiment is formulated to investigate sterile neutrinos while also aiming to directly verify the LSND experiment's results as a primary objective in physics. The approach involves utilizing muon decay-at-rest neutrinos and observing the appearance of anti-electron neutrinos at the J-PARC Material and Life Science Facility. The neutrino target comprises 17 tonnes of gadolinium-loaded liquid scintillator combined with 10 percent diisopropylnaphthalene (DIPN), surrounded by 31 tonnes of unloaded liquid scintillator that includes gamma-catcher and veto layers. This presentation offers a brief overview of the potential opportunities for exploring Beyond Standard Model (BSM) physics using the JSNS2 detector, along with the current status of the experiment.

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