

# Study of PMT saturation for JSNS2 experiment

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The JSNS2 experiment will search for a sterile neutrino with short baseline ( $\sim 24\text{m}$ ) using a high intensity neutrino beam produced from muon decays at rest at J-PARC MLF (Material and Life science experimental Facility). The experiment considers use of 10-inch Hamamatsu PMTs that are also used by RENO and Double Chooz. A study has been made to understand the PMT saturation behavior with various gains, in order to find a linear-response region of the PMT for the JSNS2. In this presentation, we report the results of the PMT saturation study.

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