

## Performance evaluation of 3-inch PMT for Hyper-Kamiokande

*Wednesday, 1 September 2021 19:15 (15)*

Hyper-Kamiokande is the next generation water Cherenkov detector for the study of neutrino oscillations including the search for leptonic CP violation using high intensity neutrino beam produced in J-PARC. In order to reduce the systematic uncertainty of the CP violation measurement, a 1kton scale Intermediate water Cherenkov detector (IWCD) is planned to be constructed around 1km downstream the J-PARC neutrino beamline. The multi-PMT modules, which consist of 19 3-inch PMTs will be installed in the IWCD to improve the detector performance with their higher granularity.

In this poster, we will present the measurements of the performance for 3-inch PMT such as time resolution, dark noise rate and relative photon detection efficiency.

**Reference to paper (DOI or arXiv)**

**Your gender (free text)**

**Primary author(s)** : KINOSHITA, Tatsushi

**Co-author(s)** : HYPER-KAMIOKANDE COLLABORATION

**Presenter(s)** : KINOSHITA, Tatsushi

**Session Classification** : Poster session 2

**Track Classification** : Neutrino physics and astrophysics