

## Long-baseline neutrino oscillation sensitivities with Hyper-Kamiokande

*Wednesday 8 September 2021 13:46 (22 minutes)*

Neutrino oscillation physics is entering the precision measurement era. The focus of next generation neutrino experiments will be to determine the parameters governing neutrino oscillations precisely. The Hyper-Kamiokande experiment, currently under construction in Japan, includes a long-baseline neutrino oscillations program. Its main goals will be to determine whether CP violation occurs in neutrino oscillations and to provide precise neutrino oscillation parameters. To achieve this, Hyper-Kamiokande will have a large fiducial volume (8 times that of Super-Kamiokande) and will benefit from the upgrade of the J-PARC neutrino beam, enabling it to collect an unprecedented amount of statistics. A thorough knowledge of systematic effects and powerful near detectors are needed to match this level of precision. This talk presents the expected sensitivity of Hyper-Kamiokande to oscillation parameters, notably CP violation, using a combination of accelerator and atmospheric neutrino information.

### Working group

WG1

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**Session Classification:** WG 1