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## Hyper-Kamiokande experiment

*Monday, 26 July 2021 17:10 (20 minutes)*

The Hyper-Kamiokande experiment consists of a 260 kt underground water Cherenkov detector with a fiducial volume more than 8 times larger than that of Super-Kamiokande. It will serve both as a far detector of a long-baseline neutrino experiment and an observatory for astrophysical neutrinos and rare decays.

The long-baseline neutrino experiment will detect neutrinos originating from the upgraded 1.3 MW neutrino beam produced at the J-PARC accelerator 295 km away. A near detector suite, close to the accelerator, will help characterise the beam and minimise systematic errors.

The experiment will investigate neutrino oscillation phenomena (including CP-violation and mass ordering) by studying accelerator, solar and atmospheric neutrinos, neutrino astronomy (solar, supernova, supernova relic neutrinos) and nucleon decays.

In this talk, we will present an overview of the Hyper-Kamiokande experiment, its current status and physics sensitivity.

### **Collaboration / Activity**

Hyper-Kamiokande

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