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Hyper-Kamiokande experiment (remote)

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Hyper-Kamiokande is a next-generation neutrino experiment that is under construction in Japan. It 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 nucleon 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 characterize the beam before the oscillation and minimize systematic errors.
The experiment will investigate neutrino oscillation phenomena including CP-violation and mass ordering by studying accelerator, solar and atmospheric neutrinos as well as conduct neutrino astronomy studying solar, supernova and supernova relic neutrinos. It will also search for nucleon decays.
In this talk, we will present an overview of the Hyper-Kamiokande experiment, its current status and physics sensitivity.

Primary author: NOGUCHI, Yohei (University of Tokyo, Kamioka Observatory)

Presenter: NOGUCHI, Yohei (University of Tokyo, Kamioka Observatory)

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