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Neutrino Oscillation Physics and Proton Decay with Hyper-Kamiokande

Thursday, 6 July 2017 17:30 (15 minutes)

Hyper-Kamiokande is a next generation water Cherekov detector consisting of 2 tanks, each with 187 kton fiducial mass, to be built in a staged approach.

Hyper-Kamiokande will detect neutrinos produced by the upgraded J-PARC accelerator complex, as well as atmospheric neutrinos.

It will make precision measurements of neutrino mixing parameters by a combination of accelerator and atmospheric neutrinos and it will enable us to search for proton decay and other exotic phenomena with an order of magnitude more data than current experiments. This talk will describe this rich physics program. Recent studies of the option for building the second tank in Korea to probe mass hierarchy will also be presented.

Experimental Collaboration

Hyper-Kamiokande Collaboration

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Session Classification: Neutrino physics

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