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The Status of Hyper-Kamiokande

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Hyper-Kamiokande, the successor to Super-Kamiokande, is a third-generation ring imaging water Cherenkov detector in development in Japan. Serving as the far detector to the JPARC neutrino beam with a 295-kilometer baseline, it promises heightened sensitivity for precise oscillation parameter measurements. This presentation outlines Hyper-Kamiokande's current status, construction stages, and its role alongside the beamline and near detectors, the Intermediate Water Cherenkov Detector, ND280 and INGRID.

Hyper-Kamiokande aims to address key questions in neutrino physics, such as CP-violation in the lepton sector and the hierarchy of neutrino masses. Additionally, it holds potential for uncovering physics beyond the Standard Model, including the search for proton decay. This presentation emphasizes Hyper-Kamiokande's significance in advancing our understanding of neutrinos and exploring new frontiers in particle physics.

Keyword-1

neutrinos

Keyword-2

oscillations

Keyword-3

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