

The 2nd Hyper-Kamiokande detector in Korea

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Hyper-Kamiokande (Hyper-K) is a next generation water Cherenkov detector in Japan consisting of two identical detectors (2x260 kton) with a staged construction.

Main goals of Hyper-K are a definitive measurement of CP violation and neutrino mass ordering determination using beam neutrinos from J-PARC.

By relocating the 2nd detector in Korea with more than 3 times longer baseline and more matter effect the sensitivities on the two measurements and non-standard neutrino interaction are improved.

Thanks to a larger overburden in Korean candidate sites, sensitivities on solar, supernova, and supernova relic neutrinos are also improved.

In this talk I introduce this interesting option of having the 2nd tank in Korea and present the physics potentials.

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