

Sensitivity Studies for Near Detectors in a Tokai-to-Hyper-K Experiment

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The sensitivities for measuring CP violation and other neutrino oscillation parameters in a Tokai-to-Hyper-K long baseline experiment depend on systematic uncertainties in the neutrino flux and cross section models. These model uncertainties are constrained by data from near detectors. In this talk, I will present studies of the effect of near detector data on the CP violation sensitivity for different assumptions about the properties of the near detector, including its distance from the neutrino production point, the direction to the near detector, and the target material of the near detector.

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