Abstract Submitted for the APR17 Meeting of The American Physical Society

Systematics Treatment in oscillation analyses in IceCube-DeepCore ELIM CHEUNG, Univ of Maryland-College Park, ICECUBE NEU-TRINO OBSERVATORY COLLABORATION — Located deep under the ice at the South Pole, the IceCube Neutrino Observatory is a 1 cubic kilometer telescope, searching for neutrinos from various sources. With DeepCore, a denser infill array inside IceCube, atmospheric neutrinos down to 10 GeV can be detected, allowing neutrino oscillation studies. In those analyses, many systematics need to be taken into account, including uncertainties from neutrino cross sections in the ice, detector calibration, and atmospheric neutrino fluxes. In this talk, I will present how systematics are treated in IceCube neutrino oscillation analyses in general. In particular, I will focus on the neutrino flux uncertainties.

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Date submitted: 30 Sep 2016

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