Abstract Submitted
for the APR11 Meeting of
The American Physical Society

High Energy Calibrations of Super-Kamiokande JOSHUA HIGNIGHT, SUNY Stony Brook, SUPER-KAMIOKANDE COLLABORATION — Super-Kamiokande is a Large Water Cherenkov Detector Located on the west coast of the main island of Japan. Its primary purpose is to look for nucleon decay, study atmospheric and solar neutrinos, as well as act as the far detector for a Long Baseline Neutrino Experiment, T2K. As with any experiment, an exact energy calibration of the detector is needed. At Super-Kamiokande there are three primary methods involved in this calibration for the energy range above the solar neutrino energies, namely above about 20 MeV, and each of these methods covers different energy regions. These methods include using high and low energy stopping muons, looking at the π^0 invariant mass peak, and studying the Michel- electron spectrum. In this talk we will discuss in some detail the exact methods used, the energy ranges covered, and some of the final results.

Joshua Hignight
SUNY Stony Brook

Date submitted: 14 Jan 2011 Electronic form version 1.4