



CU Physics Department Particle Seminar

Wednesday, November 14, 2007 705 Pupin Hall 1:00 PM



SciBooNE, new neutrino experiment at FNAL

The precise measurement of the neutrino-nucleus cross-section in the few GeV energy range is an essential ingredient in the interpretation of the neutrino oscillation experiment. For the measurement of the cross-sections, a new experiment, SciBooNE experiment, has been proposed and approved in Fermilab. From June 2007, SciBooNE experiment has started operation and data taking.

The experiment is carried out by installing the K2K SciBar detector in the FNAL Booster Neutrino Beamline. The marriage of a high rate, low energy neutrino beam and the fine granularity of SciBar detector is a unique for precise measurement of the cross sections since both are already built and have been operated very successfully.

We will present an overview of the SciBooNE physics program with emphasis on unique elements of the detector systems which allow for identification and measurement of several types of neutrino interactions.

Hide Tanaka, Columbia University

