Postdoctoral Research Associate Position in The T2K Experiment
The State University of New York (SUNY) at Stony Brook

The Nucleon decay and Neutrino group at Stony Brook has an opening for postdoctoral research associate position working on the T2K experiment. Qualified candidates are invited to apply.

The Stony Brook group has participated in the Super-Kamiokande, K2K and T2K experiments in Japan for the last two decades. Currently the group is composed of four faculty members, three postdoctoral research associates, five graduate students and three undergraduate students. Recently, the group’s effort has been focused on the T2K experiment, which started taking data in 2010.

T2K (http://t2k-experiment.org/) is the first long baseline neutrino oscillation experiments proposed and approved to search for an electron neutrino appearance signature from the oscillations of muon neutrinos using accelerator generated neutrino beams. T2K now has results on electron neutrino appearance at 3.2 $\sigma$ level of significance that confirmed their previous published results in PRL, in July 2011 which reported the first single experimental indication that $\theta_{13}$ is non-zero and large with a 2.5 $\sigma$ level of significance. The recent precision results on $\theta_{13}$ from nuclear power reactor experiments are in agreement with this T2K result. These recent advances now pave the way to resolve the unknown neutrino mass hierarchy and to explore CP violation in the lepton sector, which may hold a key to our understanding of the matter-antimatter asymmetry in the Universe.

The Stony Brook group (http://nngroup.physics.sunysb.edu/) is involved in the ND280 off-axis pi-zero detector (POD) and ND280 off-axis detector software. We are also involved in the T2K-SK activities for Super-Kamiokande detector calibration, event reconstruction and data processing. We are participating in the various data and physics analysis including oscillation analysis of the experiment. In the future, the group will likely participate in the possible T2K near detector upgrade and/or in the next generation large neutrino/proton decay experiments.

Each candidate must have a Ph.D. degree in experimental particle physics. The successful applicant will travel to Japan, and is expected to participate in a variety of hardware, software and physics analysis activities. S/he will be given a considerable amount of freedom in choosing research topics. S/he will also have opportunities to work on Super-Kamiokande as a formal member if desired. S/he will be an employee of the Research Foundation of SUNY, whose policies will apply. If you are interested in this position, send your CV and research statement, and arrange for at least three letters of reference to:

Prof. Chang Kee Jung
Dept. of Physics and Astronomy
Stony Brook University
Stony Brook, New York 11794-3800
U.S.A.

The application and letters can also be sent to the following e-mail address: chang.jung@stonybrook.edu. The deadline for the application is August 15, 2012. Start date of the position is flexible and salary will be commensurate with experience. For an outstanding candidate, a one-time special departmental fellowship will be offered besides the normal annual salary.

The Research Foundation of the State University of New York at Stony Brook is an Equal Opportunity/Affirmative Action Employer.