

**Postdoctoral Research Associate Position in The T2K Experiment**  
**Stony Brook University**  
**Stony Brook, New York**

The Nucleon decay and Neutrino (NN) group at Stony Brook has an opening for postdoctoral research associate position working on the T2K long baseline neutrino oscillation experiment in Japan. Qualified candidates are invited to apply for the position.

The Stony Brook NN group has been participating in the Super-Kamiokande, K2K and T2K experiments in Japan for almost two decades. Currently the group is composed of four faculty members, one postdoctoral research associate, three graduate students and three undergraduate students. Recently, the group's effort has been focused on the T2K experiment, which is in the construction stage and will start taking data in 2009.

T2K is the first long baseline neutrino oscillation experiments proposed and approved for searching for electron neutrino appearance signature from the oscillations of muon neutrinos using accelerator generated neutrino beams. If observed, this will allow us to measure the mixing angle between the 1<sup>st</sup> and 3<sup>rd</sup> generation neutrinos, the last unknown mixing angle in the lepton sector. This will also pave the way 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 NN group is heavily involved in the ND280 off-axis pi-zero detector (P0D) and ND280 off-axis detector software. The P0D detector is a component of the T2K near detector system that provides information on the pi-zero background to the electron neutrino appearance signal in the far (Super-Kamiokande) detector. We expect to participate in the data and physics analysis of the experiment vigorously as the data become available.

Each candidate must have a Ph.D. degree in experimental particle physics. The successful applicant will travel to Japan frequently and have opportunities to work on Super-Kamiokande if desired. S/he will be an employee of the Research Foundation of the State University of New York, whose policies will apply. If you are interested in this position, please send your CV 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 applications and letters can also be sent to the following e-mail address:  
[chang.jung@stonybrook.edu](mailto:chang.jung@stonybrook.edu).

The position can start immediately. While the initial deadline for the application is February 15, 2009, late applications will be accepted until the position is filled.

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