Postdoctoral Position in Experimental Neutrino Physics at UC Davis

The experimental Neutrinos and Dark Matter (NDM) group at the University of California, Davis invites applications for a postdoctoral position with an anticipated start date of July 1, 2016. A Ph.D. in particle physics is required. The successful candidate will participate in the data analysis of the ongoing ANNIE and/or SNO+ experiments, but also contribute to the technological development of a new generation of large, ultra-fast high-resolution experiments using Micro-Channel Plates (MCP's) and advanced formulations of liquid scintillator.

The Accelerator Neutrino Neutron Interaction Experiment (ANNIE) is an experiment in the Booster Neutrino Beam to measure the neutron yield as a function of momentum transfer for neutrino interactions in the range of 0.1-1 GeV/c. This is very important in understanding background and nuclear effects in future long baseline and underground experiments and is also a test bed for the Large Area Picosecond Photo-Detectors (LAPPD's). ANNIE is just now turning on for a background run in the Booster Neutrino Beam (BNB) this year, and a future Run 2 is anticipated in the near future. UC Davis has also proposed the TARDIS MCP beam test experiment with BNL, LLNL, and LBL and is participating in the conceptual design of the THEIA experiment for the Long Baseline Neutrino Facility (LBNF).

The successful candidate would also have the opportunity to participate in data analysis and operation of SNO+, a multi-purpose underground neutrino detector. This experiment begin taking data in 2016 as part of a three-phase program in physics that includes proton decay, supernovae, neutrino oscillations, solar neutrinos, and neutrinoless double beta decay.

The UC Davis NDM Group is very strong, consisting of three professors, five postdocs, and ten graduate students. In addition to the above experiments, we are also involved in LUX/LZ, DarkSide, and DUNE. The campus has excellent shop facilities, a 1.5 MW TRIGA reactor and a 67 MeV cyclotron with variable energy proton and neutron beams for use in detector development. Our proximity to LBL, SLAC, and LLNL also allows for collaborative projects and convenient access to national lab facilities. This is a truly excellent opportunity for a talented experimental physicist to develop new ideas and exercise their creativity.

Interested candidates should email a curriculum vita, statement of research interests and the name and addresses of three references to rsvoboda@physics.ucdavis.edu. Apply by June 1 for best consideration, but the position will remain open until filled.

The University of California, Davis, is an affirmative action/equal opportunity employer with a strong institutional commitment to the achievement of diversity among its faculty and staff.