



Department of Physics
102 Science Hall, 502 Yates St, Arlington, TX 76019

The Physics Department at the University of Texas Arlington invites applications for a postdoctoral researcher to work in experimental neutrino physics. The successful candidate will work closely with Dr. Ben Jones and Dr. David Nygren on topics relating to the IceCube and NEXT experiments.

IceCube is a one-billion-ton neutrino detector at the South Pole, which, in addition to studying astrophysical neutrinos, has made world-leading measurements of neutrino properties. The UTA group has a central role in the IceCube sterile neutrino search, which holds the world's strongest published limit on eV-scale sterile neutrinos. We are planning to extend this analysis with five times more data and develop further searches for new neutrino physics at IceCube.

The NEXT program is focused on development of a high-pressure xenon gas detector that will achieve unprecedented levels of background rejection for a ton-scale neutrinoless double beta decay search. UTA is the primary US institution within the NEXT collaboration, and we are undertaking tasks in R&D and construction including TPC and electroluminescent readout development, gas mixture studies, barium tagging R&D, and analysis of data from the presently commissioning NEXT-NEW detector. The successful candidate may work on a selection of these topics that match their interests, or others.

A Ph.D. in experimental particle physics is required, although not necessarily in neutrino physics. The initial appointment will be for two years, with the possibility for renewal contingent on performance and funding.

Application review will begin immediately and will continue until the position is filled. Interested candidates should arrange to have emailed a cover letter, curriculum vitae, statement of research interests, and three letters of recommendation to ben.jones@uta.edu. The University of Texas at Arlington is an equal opportunity employer.