

China to Build Underground Neutrino Lab

China plans to build a large underground laboratory for neutrino experiments in Jiangmen, southern Guangdong Province, by the end of this year. The project is led by China with more than 200 scientists from over 50 research institutes and universities around the world. A fundamental particle, neutrinos play an extremely important role in particle physics and cosmogenic evolution. Following the Daya Bay Reactor Neutrino Experiment in Guangdong, Chinese and foreign physicists announced in 2012 that they had confirmed and measured a third type of neutrino oscillation. The Jiangmen lab will be the second Chinese neutrino project, and will help scientists determine the neutrino mass hierarchy. The new lab will be 700 meters underground and more than 100 times larger than the Daya Bay project. The new lab is expected to open by the end of 2019, with a planned running time of 20 years. It is hoped that the new lab will unravel the mysteries of quantum physics and make major contributions to cosmology, astrophysics and geophysics.

