



RESEARCH INFRASTRUCTURES

SOUTH DAKOTA: CONSTRUCTION OF THE GIGANTIC LBNF GETS UNDER WAY

The inauguration ceremony of the construction work for the gigantic Long Baseline Neutrino Facility (LBNF), which involves a community of about 1,000 scientists and engineers from 30 countries, took place on July 21 in the Sanford Underground Research Facility (SURF) in South Dakota (USA).

LBNF will host the world's largest experiment, with international governance, for the study of the properties of neutrinos: the Deep Underground Neutrino Experiment (DUNE), which will study neutrinos generated and sent 1300 km away from the Fermilab in Chicago, the leading American national laboratory for research on accelerators and particle physics. The experiment has two main scientific goals in studying neutrinos: measuring the neutrino mass hierarchy and measuring the violation of symmetry between matter and antimatter (CP violation).

The project is funded by the United States Department of Energy - Office of Science in collaboration with CERN and international partners from nearly 30 countries. Fermilab is a scientific laboratory of the US Department of Energy - Office of Science, located near Chicago, Illinois, and is managed by the Fermi Research Alliance, LLC. ■