Review of progress in the development of liquid-argon detectors and the CERN Neutrino Platform

F Pietropaolo
CERN, Switzerland

The European Strategy for Particle Physics of 2013 classified the long-baseline neutrino programme as one of the four highest-priority scientific objectives with required international infrastructure. In this framework, CERN has created a "Neutrino platform", part of the present CERN MTP, with the intention to do detector R&D and offer support to future international neutrino experiments, as well as to provide a basis to unify the European neutrino communities towards contributing to the US and Japanese projects. In particular, significant R&D effort is made on LAr TPC technologies.

As a significant part of the Neutrino platform facilities, CERN is constructing a large test area (EHN1 extension) with charged beams capabilities devoted to neutrino detectors, which will be available from 2017. In this talk, a description of the CERN Neutrino platform facilities will be given as well as an overview of the main neutrino detector projects presently under development.