

The 19th International Workshop on Neutrinos from Accelerators (NUFACT2017)



Contribution ID: **140**

Type: **talk**

Status of DUNE

Thursday, 28 September 2017 09:00 (30 minutes)

DUNE, the Deep Underground Neutrino Experiment, is a next-generation experiment for neutrino science, nucleon decay, and supernova physics. The experiment is enabled by the Long Baseline Neutrino Facility, LBNF. The experiment will consist of a high-intensity neutrino beam from Fermilab (FNAL), a highly capable neutrino near detector at FNAL, and a 40-kton fiducial mass, underground, far detector at the Sanford Underground Research Facility (SURF). The year 2017 marks the beginning of DUNE civil construction at SURF. Physics with the DUNE far detector is expected to start in 2024, while first neutrino beam from FNAL to SURF is expected in 2026. During this talk I will focus on two aspects. First, I will discuss the DUNE projected physics reach, with a focus on long-baseline neutrino oscillation physics. Second, I will describe the DUNE/LBNF project status, with an emphasis on the design of the far and near neutrino detectors and on the related prototyping activities.

Primary author: SOREL, Michel (IFIC (CSIC and U. Valencia))

Presenter: SOREL, Michel (IFIC (CSIC and U. Valencia))

Session Classification: Plenary session

Track Classification: Plenary sessions