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## DUNE: Status, progress and plans

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The Deep Underground Neutrino Experiment (DUNE) is a flagship-international project in particle physics and one of the most ambitious neutrino beam experiments ever conceived, hosted by the United States DOE national laboratory, Fermilab. DUNE will play an essential role in studies of neutrino mass ordering, CP violation, and precise measurements of neutrino mixing parameters, as well as in the search for proton decay and supernova neutrinos. This experiment will use four 17 kt modules of LarTPCs (Liquid Argon Time Projection Chamber) detectors. This technology uses planes of parallel wires connected to a potential difference in liquid argon to reconstruct particles with precision comparable to a fully electronic bubble chamber. DUNE will consist of a far detector and a near detector exposed to the world's most intense neutrino beam originating from the Long Base Neutrino Facility (LBNF). Two prototypes have been built at CERN, which will not only serve as a test bed for engineering design and construction techniques, but will also provide a set of key measurements for the far-future DUNE detector. In this talk I will overview the Project with emphasis on the status of the construction, physics performance, and the demonstration of the DUNE technology at CERN.

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**Classification de Session:** Experiments