Contribution ID: **153** Type: **Oral**

The CERN Neutrino Platform

Wednesday, 5 June 2019 17:39 (23 minutes)

The European Strategy for Particle Physics has classified in 2013 the long-baseline neutrino programme as one of the four highest-priority scientific objectives. The Neutrino Platform was then born as the CERN enterprise to encourage and support the next generation of accelerator-based neutrino oscillation experiments. Part of the present CERN Medium-Term Plan, the Neutrino Platform has since been providing facilities to develop and prototype the next generation of neutrino detectors. It also acts as the hub for the European neutrino community engaged in US and Japanese projects.
A very important guideline of the Platform is the R&D on LAr-TPC technologies, carried out on small- and large-scale detectors dedicated to neutrino physics and, more recently, Dark Matter searches. The most significant result is the construction of the two prototypes of the DUNE far detector, one of which (Single Phase) had a successful beam run in 2018 and is still collecting cosmics. The second detector (Dual Phase) is going to be commissioned in the summer. The Platform is also strongly involved in FNAL SBN program, as it hosted the ICARUS T600 refurbishment and it is now a main actor in its upcoming commissioning, as well as in the construction of the near detector, SBND.
However the Platform is involved in a much wider range of activities, among which we find the newly added ENUBET project and the T2K experiment, which includes the BabyMIND magnetized muon spectrometer and recent participation to the ND280 near detector upgrade. All these activities will be presented in this contribution, along with an overview of the upcoming future of the Neutrino Platform

Collaboration name

CERN Neutrino Platform

Primary author: ZANI, Andrea (CERN)

Presenter: ZANI, Andrea (CERN)

Session Classification: Neutrino

Track Classification: Neutrino Physics