



ID de Contribution: 176

Type: **Ordinary**

## Oscillation results from T2K

*lundi 17 mars 2014 09:20 (15 minutes)*

The Tokai to Kamioka (T2K) experiment is a long baseline neutrino oscillation experiment situated in Japan. A high intensity neutrino beam is produced at the Japan Proton Accelerator Research Complex, in Tokai, Japan. A near detector complex, situated 280 m from the neutrino production target, and the far detector at 295 km, are used to detect the neutrinos from this beam. This talk will review the latest T2K results on neutrino oscillation using the data collected up to May 2013, including the observation of electron neutrino appearance from a muon neutrino beam and a high precision measurement of muon neutrino disappearance. Now that all of the neutrino mixing angles have been measured, the next step is to search for CP violation in the lepton sector, to which only appearance experiments are sensitive. Efforts towards high precision measurements of CP violation,  $\theta_{23}$ , and sensitivity to the neutrino mass hierarchy will be discussed.

**Auteur principal:** M. DE PERIO, Patrick (University of Toronto)

**Orateur:** M. DE PERIO, Patrick (University of Toronto)

**Classification de Session:** Neutrino experiments

**Classification de thématique:** Experiment