Contribution ID: **390** Type: **Talk**

Neutrino Oscillations Results from the T2K Experiment

Tuesday, 28 July 2020 19:00 (15 minutes)

The T2K experiment probes the masses and mixing of neutrinos through measurements of neutrino oscillations. A beam of muon neutrinos or muon antineutrinos is generated at the J-PARC proton accelerator on the east coast of Japan, and the beam's composition is measured 295 km away in the Super-Kamiokande detector. The transition of muon neutrinos and antineutrinos to other flavors and the appearance of electron neutrinos and antineutrinos are governed by neutrino mixing and mass parameters, including the phase δ_{cp}, which determines the amount of CP violation in neutrino mixing. Previous measurements from T2K have shown a strong constraint on δ_{cp} with the exclusion of a significant fraction of δ_{cp} values at 3σ confidence. Here, we present the latest results from T2K with data collected through 2020 and the prospects for more sensitive measurements by T2K in the future.

I read the instructions

Secondary track (number)

Primary author: MUNTEANU, Laura-Iuliana (Université Paris-Saclay (FR))

Presenter: MUNTEANU, Laura-Iuliana (Université Paris-Saclay (FR))

Session Classification: Neutrino Physics

Track Classification: 02. Neutrino Physics