



Contribution ID: 140

Type: not specified

The latest results from the long-baseline neutrino experiment T2K

T2K is a long-baseline experiment which has been designed to measure neutrino oscillations.

A high intensity beam of muon neutrinos or anti-neutrinos is produced at the J-PARC accelerator complex and sent towards the near detector station (280 meters away from the neutrino source) and the far detector Super-Kamiokande (295 km).

The change in the measured intensity and composition of the beam is used to provide information on the oscillation parameters.

The T2K experiment has provided one of the world's best measurements of the θ_{23} angle and delivered 2σ confidence intervals for δ_{CP} phase shedding some light on the CP violation/conservation problem in the neutrino sector.

Several useful neutrino cross section measurements have also been performed by the T2K experiment allowing to improve our understanding of the neutrino interactions.

A summary of the recent measurements from the T2K experiment are presented.

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