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# Recent results from the T2K experiment

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## Abstract

From 2010 the T2K (Tokai to Kamioka) experiment, in Japan, has been producing world-leading results in neutrino oscillation physics and is approved to further collect data. It consists of a very powerful high purity muon neutrino (and antineutrino) beam produced at J-PARC (Tokai) and sent to the Super-Kamiokande detector (SK), located 295 km away. As set of complex near-detectors, ND280, is used to characterise the neutrino beam before oscillation and to better understand neutrino interactions. The latest results of the joint neutrino-antineutrino analysts with 3.16x10^21 POT(proton on target) accumulated statistics will be presented.
The main objective of the experiment for the near future is to advance in the search for CP violation effects (deltaCP). This relies in increasing the available statistics, but also on applying the so-called reactor constraint. The usual approach uses the theta13 value from reactor experiments to disentangle the correlation between theta13 and deltaCP provided by T2K, neglecting the reactor sensitivity to other parameters as the atmospheric mass splitting.
An alternative method using all available information will be presented.

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