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## Recent T2K Neutrino Oscillation Results

*Tuesday, August 6, 2019 2:00 PM (12 minutes)*

### Summary

T2K is a long baseline neutrino experiment producing a beam of muon neutrinos at the Japan Particle Accelerator Research Centre on the East coast of Japan and measuring their oscillated state 295 km away at the Super Kamiokande detector. Since 2016 T2K has doubled its data in both neutrino and antineutrino beam modes. Coupled with improvements in analysis techniques this has enabled the experiment to make world leading measurements of the PMNS oscillation parameters  $\Delta m^2_{32}$ ,  $\sin^2(\theta_{23})$  and the CP violating phase  $\delta_{CP}$ . In particular the CP conserving values of  $\delta_{CP}$  now appear to be disfavoured at the 95% CL and there are regions of parameter space excluded at the 99.7% CL. This talk will describe these results and the analysis improvements that have enabled them.

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