Contribution ID: **59** Type: **Plenary session**

Neutrino oscillation with global data analysis

Monday 27 May 2024 16:05 (30 minutes)

Results of a global data analysis can constrain the default 3-neutrino mixing scheme given unitarity assumption, based on recent data from the reactor, solar and long-baseline accelerator neutrino oscillation experiments. It is straightforward to extend the analysis towards the non-unitary assumption. Meanwhile, global neutrino data scrutiny serves as a probe of new physics such as whether there exist sterile neutrinos, CPT violations,
and neutrino couplings with light dark matter. Meanwhile, it is promising to check the improvements on these aspects at next-generation neutrino oscillation experiments such as DUNE, T2HK, and JUNO. This talk will cover what we have learned in the past, what we will know with the future efforts and proposals.

Primary author: Prof. TANG, Jian (Sun Yat-Sen University(CN))

Presenter: Prof. TANG, Jian (Sun Yat-Sen University(CN))

Session Classification: Neutrino Physics

Track Classification: Neutrino physics