Contribution ID: **3** Type: **Contributed Talk**

Neutrino studies with FASER

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The FASER experiment at the LHC is designed to search for light, weakly-coupled new particles, and to study high-energy neutrinos. The experiment has been running since 2022, and has collected nearly 200/fb of pp collision data. FASER has released several neutrino results including the first observation of electron and muon neutrinos at a particle collider, the first measurement of the muon and electron neutrino interaction cross sections in the TeV energy range, and the first differential measurement with muon neutrinos and anti-neutrinos. This talk will summarise the FASER experiment, the neutrino results, and discuss future prospects for FASER neutrino results.

Neutrino Properties

yes

Neutrino Telescopes & Multi-messenger

no

Neutrino Theory & Cosmology

no

Data Science and Detector R&D

no

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