

# The 43rd International Symposium on Physics in Collision - PIC 2024



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## Neutrinos at the LHC

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Two neutrino detectors have been in operation at the LHC interaction point 1 since the start of Run 3 in 2022. The SND@LHC and FASER experiments perform measurements with neutrinos produced at the LHC. These are the highest-energy human-made neutrinos and they are produced in a hitherto unexplored pseudo-rapidity range, inaccessible to other LHC experiments. Their configurations allow efficiently distinguishing between all three neutrino flavours, opening a unique opportunity to probe physics of heavy flavour production at the LHC, as well as measuring TeV scale neutrino cross sections and test lepton flavour universality. This talk will focus on the results obtained by the experiments with the first two years of data taking at the LHC, as well as the plans for the high-luminosity phase of the collider.

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