The 28th International Workshop on Weak Interactions and Neutrinos (WIN2021)

Contribution ID: **93** Type: **Poster session**

Non-standard interactions and the future of the neutrino solar sector

The complementarity between the medium-baseline reactor experiment JUNO and the capability of Hyper-Kamiokande to measure solar neutrinos is addressed. We focus on the future of the solar sector of neutrino oscillations in the presence of non-universal and flavour-changing non-standard interactions (NSI) with d-quarks. In an individual analysis of each experiment including NSI, the understanding of the overall picture can be considerably degraded. However, an approach combining JUNO and HK is shown to significantly improve the constraints on NSI and to ensure a robust and precise determination of the oscillation parameters.

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Session Classification: Neutrino Physics Session 2

Track Classification: Neutrino Physics