

# The T2K Near Detector Upgrade

*Wednesday, May 26, 2021 5:30 AM (18 minutes)*

The T2K collaboration is preparing for an increase of the exposure aimed at establishing leptonic CP violation at  $3\sigma$  level for a significant fraction of the possible  $\delta_{CP}$  values. To reach this goal, an upgrade of the T2K near detector ND280 will be installed at J-PARC in 2022, with the aim of reducing the overall statistical and systematic uncertainties at the level of better than 4%. We have developed an innovative concept for this neutrino detection system, comprising the totally active Super-Fine-Grained-Detector (SuperFGD), two High Angle TPC (HA-TPC) and six time of flight planes.

In this talk we will report on the status of the construction of these detectors, their performances obtained in test beams.

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