
T2K perspective on CERN/NP ESPP inputs

As mandated by the 2020 ESPPU, **CERN and the Neutrino Platform have provided invaluable support to T2K**

- The ND280 Upgrade project (NP07) was largely realised at CERN, receiving support, facilities and financial contributions
- T2K has continued to take essential flux constraints from dedicated NA61/SHINE data taking campaigns
- T2K benefits from physics leadership and analysis expertise fostered via EP-NU/NP



The mandate from the 2020 ESPPU update is already paying important dividends for T2K

T2K's experience shows how crucial *continued* support from CERN and the Neutrino Platform is, and how important it will be for the next generation of experiments

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But we can't stop now! Critical challenges remain (flux, cross section, detectors)

CERN/NP is a unique European hub for cross-experiment discourse, and continued support from CERN & the NP is very important to T2K's program.

Support for T2K and future experiments should include:

- **Facilities/expertise to develop detectors**
- **Support experiments** to control flux and cross-section uncertainties
 - Continuing NA61/SHINE, considering dedicated cross-section experiments (e.g. SBN@CERN/NuSTORM), potential electron scattering experiments (e.g. WCTE)
- A formalised **platform for cross-experiment and experiment-theory** collaboration, with a focus on reducing systematic uncertainties
- **Cross-experiment analysis and detector expertise** from fellows and staff