

A collaborative effort toward the design of a Near Detector for the new generation of neutrino oscillation LBL experiment

CERN proposes to stimulate the European effort towards future LBN near detectors:

- NDs are excellent occasion to consolidate the European neutrino community and attract interested new groups
- starting from the physics measurements we need to perform with ND (flux, cross-section,..), derive the requirements on the detector technology to perform that given measurement
- studies in close contact with DUNE and ND280upgrade or nuSTEC .. contribute to the existing activities (no conflict, nor doubling meeting or efforts)
- different experimental conditions (beam, target,..) will be considered to match the characteristics of the US and Japanese future experiments

Europe can contribute to build a common knowledge base first, and later some experimental R&D, to assist DUNE and T2K/HK in the definition of the best ND configuration

CERN can be an hub for such European activities.