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## The European Spallation Source neutrino Super Beam project: Status and Prospects

ESSnuSB is a design study for a long-baseline neutrino experiment to precisely measure the CP violation in the lepton sector at the second neutrino oscillation maximum, using a beam driven by the uniquely powerful ESS linear accelerator. The ESSnuSBplus design study programme, which is an extension phase of the ESSnuSB project, aims in designing two new facilities, a Low Energy nuSTORM and a Low Energy Monitored Neutrino Beam to use them to precisely measure the neutrino-nucleus cross-section in the energy range of 0.2 –0.6 GeV, where the experimental data is very scarce. In addition, a new target station and a new water Cherenkov near-near detector will be designed to measure cross sections and serve to explore the sterile neutrino physics. An overall status of the project will be presented together with the ESSnuSB+ additions.

### Secondary track

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