

# Report from the Lund University ESSnuSB Group

*Tuesday 23 November 2021 11:00 (15 minutes)*

The ESSnuSB is a proposed long-baseline neutrino-oscillation experiment with neutrino beam production at the ESS in Lund and detection of the oscillated beam in a megaton-scale water-Cherenkov detector 360-540 km downstream. The beam would be measured before oscillation at the near-detector (ND) complex close to the production point in Lund, with the dual purpose of providing a direct neutrino flux measurement as well as measuring the interaction cross-section between nucleons and electron neutrinos. The Lund University ESSnuSB group is leading the development of the kiloton-scale water-Cherenkov component of the ND, including its reconstruction and particle identification performances. In this talk I will present the activity and latest results of the Lund University ESSnuSB group.

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