

# The 21st International Workshop on Neutrinos from Accelerators (NUFACT2019)

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## ESSnuSB Linac Design and Beam Dynamics

*Thursday 29 August 2019 11:00 (30 minutes)*

The ESS neutrino superbeam project is being studied as an upgrade to the European Spallation Source. This would entail the addition of an H<sup>-</sup> source to the existing beamline to send H<sup>-</sup> pulses in between proton pulses, effectively doubling the beam power from five to ten megawatts. An obstacle to smooth operation is the intra-beam stripping of H<sup>-</sup> within bunches, preliminary beam transport simulations are performed to quantify the magnitude of such losses. Recent design work is also reviewed, including the added cavities for increasing beam energy from 2 to 2.5 GeV and favored bunch pulsing schemes

### Working Group

WG3 : Accelerator Physics

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