



Contribution ID: 1499 Contribution code: TUPS056

Type: **Poster Presentation**

## First beam through the superconducting linac of European Spallation Source

*Tuesday 3 June 2025 16:00 (2 hours)*

The European Spallation Source (ESS), currently under construction in Lund, Sweden, is designed to be the brightest neutron source in the world. It will be driven by a superconducting proton linac with a design beam power of 5 MW and energy of 2 GeV. The construction and installation of the linac are completed for the initial user operation envisaged in 2026 with capability of 2 MW beam power and 800 MeV energy. Beam commissioning of the full linac up to the dump in the line of eyesight is planned in early 2025. At this stage, the main focus will be on establishing optimal transport of 800 MeV beam as well as validating the critical components such as the RF system, diagnostics devices and machine protection systems. This contribution presents the highlights from this commissioning phase that will send the beam through the superconducting linac of ESS for the first time.

### Footnotes

### Paper preparation format

LaTeX

### Region represented

Europe

### Funding Agency

**Author:** GORGISYAN, Ishkhan (European Spallation Source ERIC)

**Co-author:** MIYAMOTO, Ryoichi (European Spallation Source ERIC)

**Presenter:** GORGISYAN, Ishkhan (European Spallation Source ERIC)

**Session Classification:** Tuesday Poster Session

**Track Classification:** MC4: Hadron Accelerators: MC4.A14 Neutron Spallation Facilities