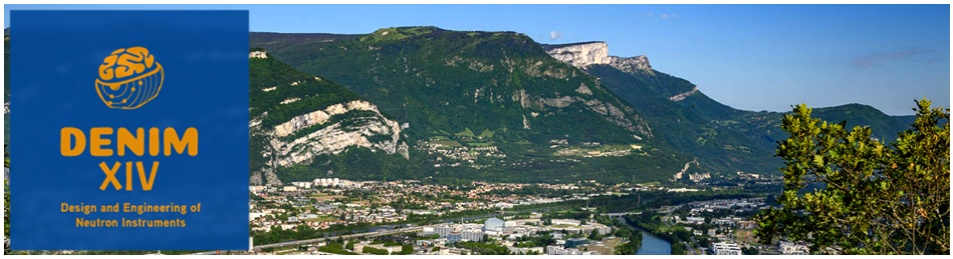

Contribution ID: **87** Type: **Poster**

Installation and commissioning of Multi-Blade detector at ESS Test Beam Line facility

Wednesday, 22 October 2025 14:16 (1 minute)

The European Spallation Source is a multi-disciplinary research facility which will deliver intense pulsed neutron beams to enable groundbreaking studies of materials in various scientific fields, including physics, chemistry, biology, and engineering. The first facility which will receive neutrons at ESS is the Test Beamline (TBL). It is designed to validate the successful commissioning of the ESS spallation source. Positioned in direct line of sight to the neutron moderator, TBL enables the characterisation of moderator using advanced suit of five detectors which will provide precise data to characterise neutron energy distribution across the moderator and neutron pulse shape for the purpose of calibration of neutron beam delivered to instruments.

The Multi-Blade (MB), a Boron-10-based neutron detector, is designed to address the demanding requirements for spatial resolution and counting rate capability. This detector is one of these five detectors that is going to be commissioned with the first production of thermal neutrons at ESS. In my poster I present the stages of installation, test, integration and commissioning of MultiBlade detector at TBL.

Primary author: GHAZI MORADI, Farnaz (European Spallation Source-ERIC)

Co-authors: Dr PFEIFFER, Dorothea (European Spallation Source-ERIC); Mr PETERSON, Jonas ((European Spallation Source-ERIC)); Mr CHRISTENSEN, Morten J. (European Spallation Source-ERIC); Mr MONERA MARTINEZ, Angel (European Spallation Source-ERIC); Mr HRIVNAK, Jan (European Spallation Source-ERIC); Dr PISCITELLI, Francesco (European Spallation Source-ERIC)

Presenter: GHAZI MORADI, Farnaz (European Spallation Source-ERIC)

Session Classification: POSTER SESSION