Charge for Fundamental and Particle Physics STAP Meeting

The ESS has identified fundamental and particle physics as integral components of its future scientific portfolio. The European and international communities have been highly active in developing ideas for fundamental and particle physics research at ESS.

To facilitate the evaluation and advisement of these ideas, the Scientific and Technical Advisory Panel (STAP) has been established to provide guidance to the ESS Science Director.

For the upcoming meeting, we request the following from the STAP:

- 1. Evaluate the proposal of the vESS collaboration, focusing on:
 - Maturity and relevance of the science case for the vESS collaboration in accordance with the ESS schedule and ramp-up conditions.
 - Clarity of identified needs for ESS support, including availability and accessibility of proposed room locations and infrastructure required for installation.
 - Assessment of whether the vESS collaboration has the necessary funding to operate the experiment in the coming years.

Provide detailed feedback on the scientific merit, feasibility, and potential impact of the proposed vESS collaboration. Consideration should be given to:

- Novelty and innovation of the proposed research approach.
- Technical feasibility of the experimental methods.
- Potential contributions to advancing fundamental understanding in particle physics and related fields.
- Alignment with ESS strategic priorities and broader scientific objectives.
- 2. Prepare a comprehensive report addressing the above questions and any related topics deemed relevant by the STAP. This report will be presented at the upcoming meeting of the ESS Scientific Advisory Committee (SAC) scheduled for April 18th and 19th.