

Contribution ID: 183 Type: not specified

## Input of the German Nuclear and Hadron Physics Community to the ESPPU 2026 Regarding the Programs at CERN, at FAIR, and Related Activities

This document summarizes the contributions of the German nuclear and hadron physics community, represented by the elected KHuK committee, to the ESPPU 2026 and complements the input from the German particle physics community submitted by KET\footnote{https://www.ketweb.de/stellungnahmen/}. Our statements and recommendations are based on both our established priorities and those outlined in the European community's NuPECC Long-Range Plan (LRP) 2024\footnote{https://nupecc.org/lrp2024/Documents/nupecc\\_lrp2024.pdf}. We focus primarily on areas of overlap with the particle physics community, including fixed-target experiments at the SPS at CERN, QCD studies in hadron and heavy-ion physics at the FAIR facility, comprising key activities within the CBM and PANDA collaborations. We also address complementary dark matter searches, precision measurements at low energies to explore beyond-standard-model physics at various facilities, and low-energy antiproton experiments at the CERN AD.

We emphasize the importance of maintaining a diverse and compelling scientific program at CERN, extending beyond the development of future colliders. Such a program offers attractive opportunities for early-career scientists to engage in cutting-edge research, while fostering related technological and methodological advancements. Furthermore, projects that deliver high-impact results in shorter time frames, while retaining flexibility to adapt to emerging developments, remain essential.

Author: BLOCK, Michael