

A new high-intensity fixed target facility at ECN3 in the CERN SPS North Area

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In the framework of the Physics Beyond Colliders Study Group, recent efforts have demonstrated the feasibility of increasing, by over an order of magnitude, the intensity of the 400 GeV proton beam delivered to the underground Experimental Cavern North 3 (ECN3) of CERN's North Area. At the June 2023 CERN Council, an ambitious study project was approved to deliver a Technical Design Report detailing a coherent upgrade plan for a new High Intensity ECN3 (HI-ECN3) fixed target facility, to start operation after Long Shutdown 3 (LS3) and to spearhead the search for the existence of physics Beyond the Standard Model at CERN, which has evaded direct discovery in high energy colliders. In this contribution, the latest status of the project is presented along with the timeline for the new, or upgraded, fixed target experimental programme at CERN.

Primary author: FRASER, Matthew (CERN)

Presenter: FRASER, Matthew (CERN)

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