



# CERN Civil Engineering – Future Studies

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28/01/2025

# Physics Beyond Colliders



## Forward Physics Facility

### Underground:

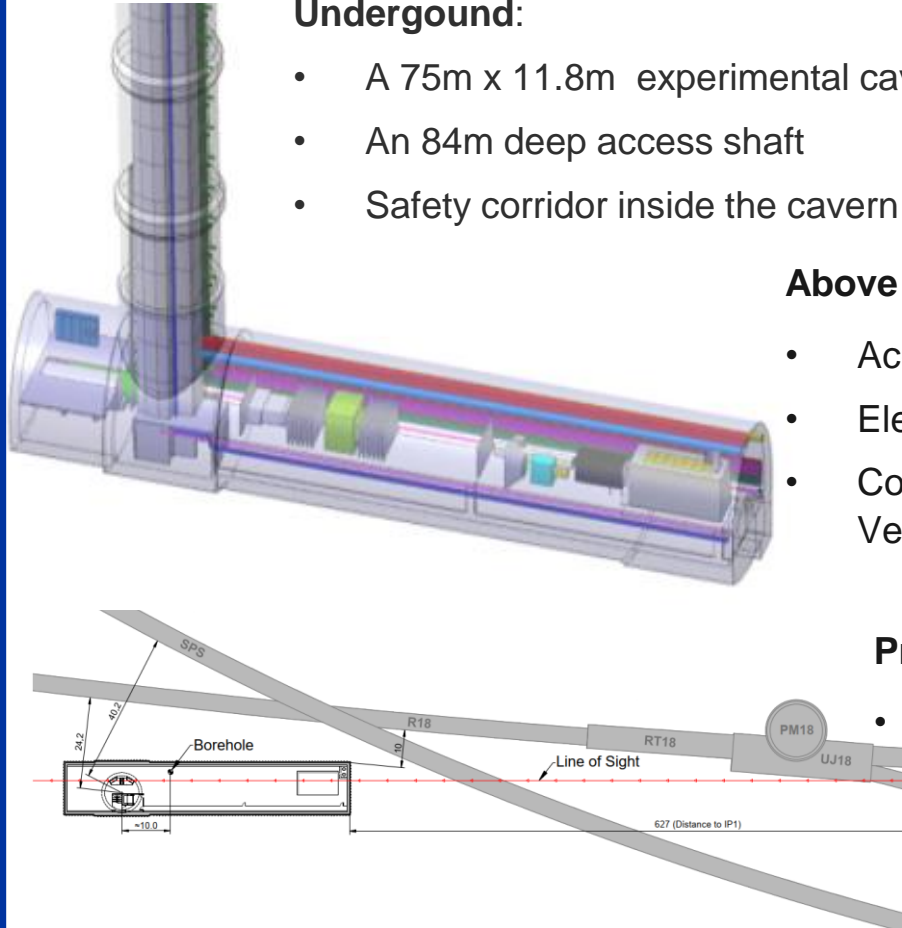
- A 75m x 11.8m experimental cavern
- An 84m deep access shaft
- Safety corridor inside the cavern

### Above ground:

- Access building
- Electrical building
- Cooling & Ventilation building

### Project Stage

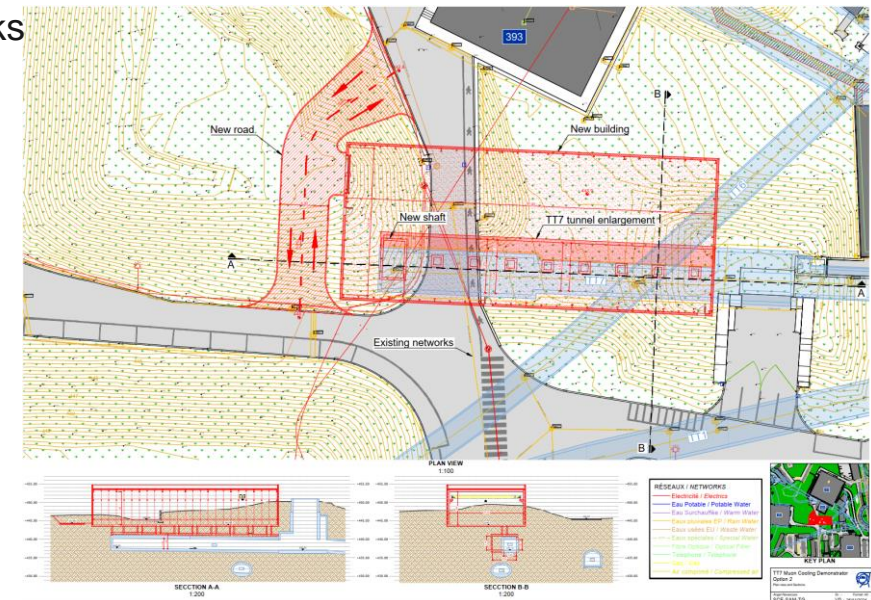
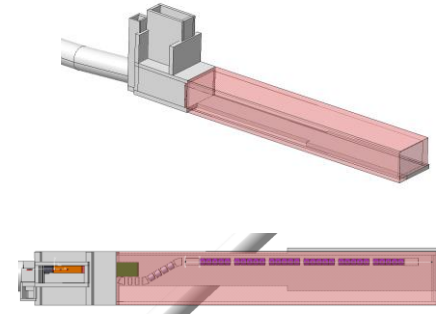
- Awaiting budget approval before detailed design stage



## Muon Cooling Demonstrator

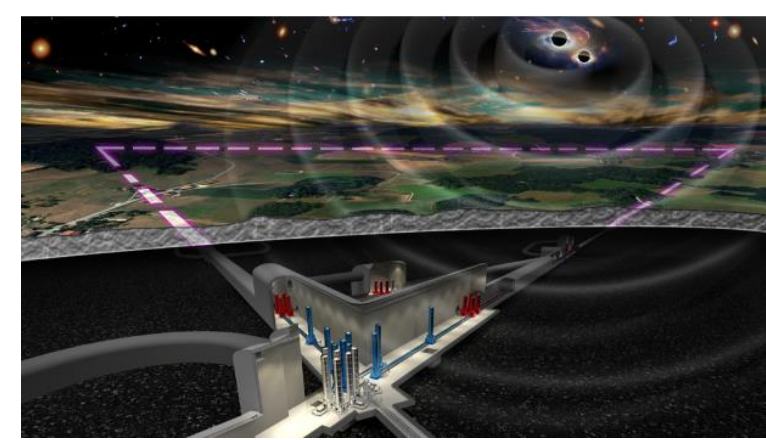
### Overview

- Proposed enlargement of existing tunnel by 3m widening over 50m length.
- Surface building over tunnel, 20m wide x 50m length
- Diversion of local road and networks





# Einstein Telescope



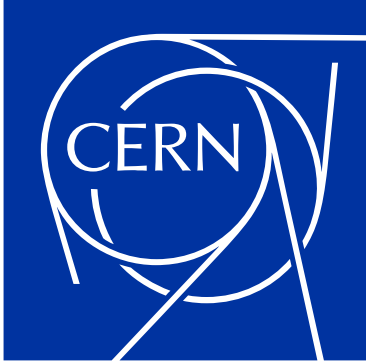
## Collaboration between CERN and ETO involves:

- Ongoing collaboration agreement ongoing until 31st December 2026
- Future Studies Section will provide support in the civil engineering activities required for the delivery of a TDR
- Site independent
- Support for the ET Engineering Department
- Advice on shared design platforms
- Technical reviews of civil engineering reports
- Technical input where appropriate

## Collaboration Achievements...

- Successful workshops at CERN, hosting colleagues from ETO, INFN, Nikhef, IFAE, Local Teams,
- Comments from local teams' on roadmap document addressed
- Identified challenges and considered next steps together
- Decision to start a taskforce involving local teams and ETO and CERN together





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