

Plans for the SND@LHC muon/HCAL test beam



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General set-up

Detector Layout

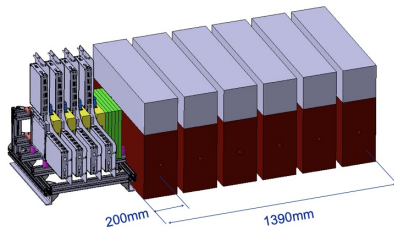
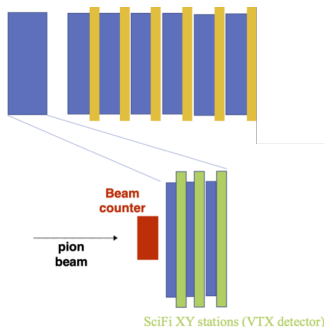
- ▶ Muon system: 5 US planes, 1 DS plane + passive iron
- ▶ Target: iron interleaved with 4 Scifi planes
- ▶ Scintillator beam counter

Beam Specs

- ▶ Beamline: H8
- ▶ Particle type: π^+ , π^-
- ▶ Energy: 100, 140, 180, 240, 300, 350 GeV
- ▶ Size: 1 cm^2
- ▶ Intensity / Duration: 1 kHz / 1 hour

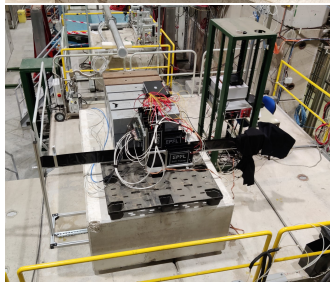
List of Tests:

- ▶ $\times 6$ Energies
- ▶ $\times 4$ Target configurations (3 + 1 no target)
- ▶ $\times 3$ Gain settings
- ▶ Total: 72 hours (data taking)
→ 3 - 4 days



General set-up

- ▶ Target
 - Material: Iron
 - Length: 30 cm
 - Area: $30 \times 30 \text{ cm}^2$
 - Segmentation: 10 cm in z ($\times 3$)
- ▶ Scifi
 - Planes: $\times 4$
 - Area: $16 \times 16 \text{ cm}^2$
- ▶ Muon/HCAL
 - Planes: $\times 5$
 - Area: $82.5 \times 60 \text{ cm}^2$



Test Beam timeline (May 24 - June 7)

