



H6 Beamline: Final Focus Study for Future Silicon Detectors

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Physics



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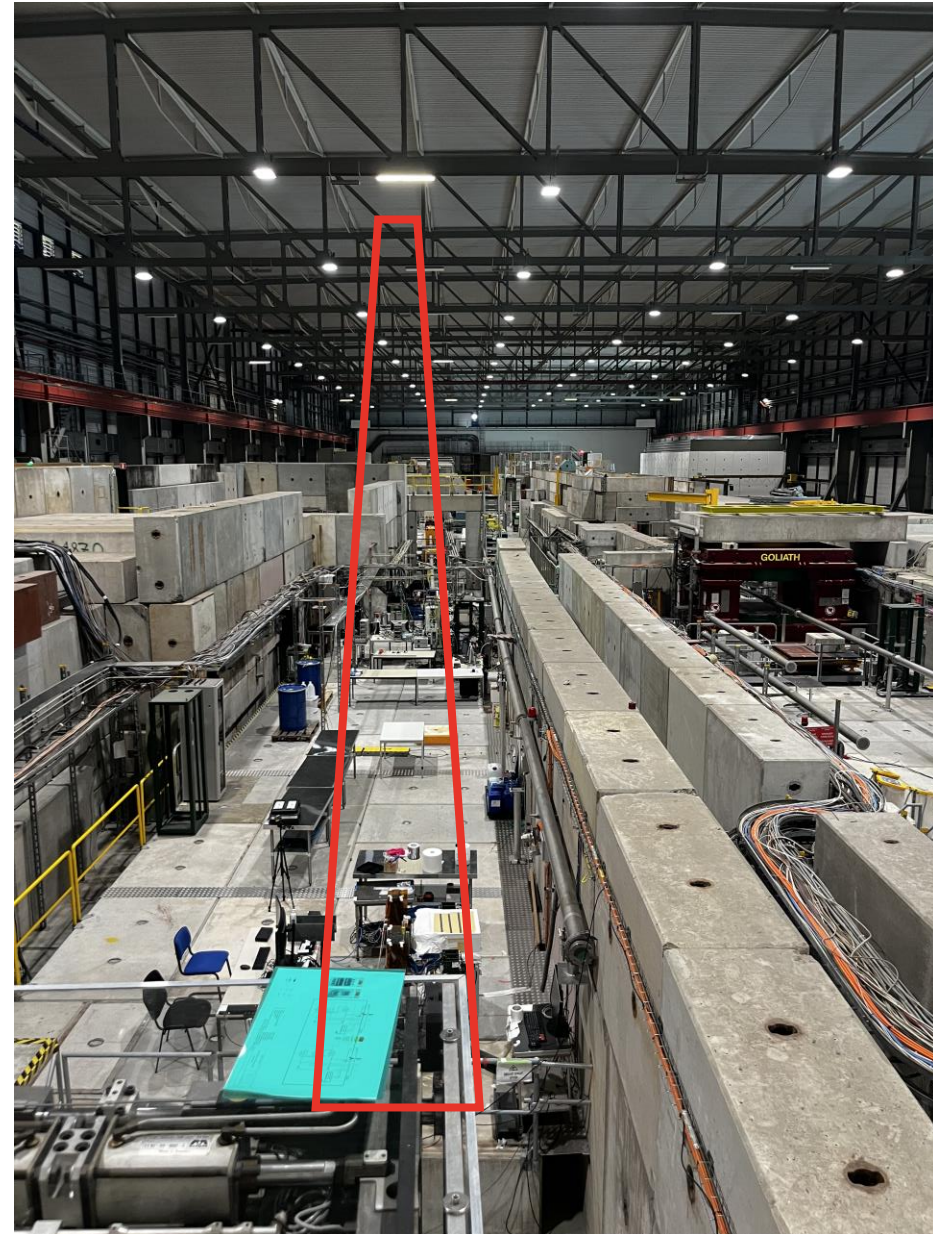
BE-EA-LE

(Beams Department - Experimental Areas - Liaison with Experiments)

- Work on the H6 secondary beamline to meet user needs
- Test beams for research and development
- Test pixel technology from ATLAS and CMS
- Test EP Pixel detectors
- Increase the flexibility and abilities of the user zones

Extension to the H6 Beamline

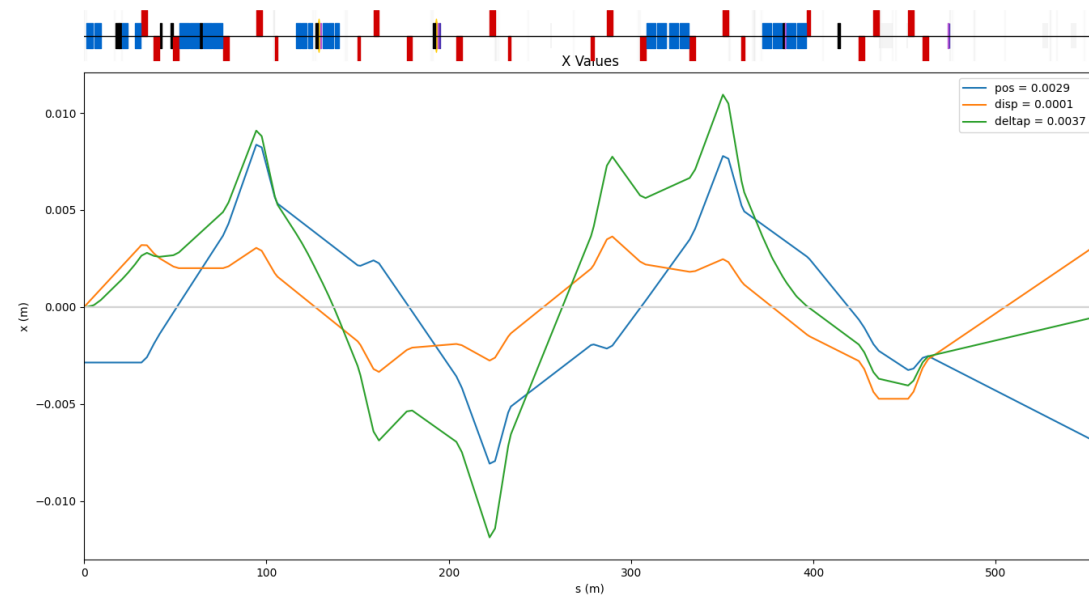
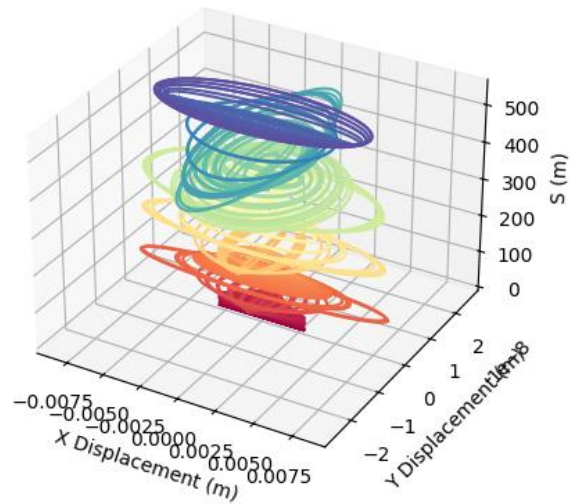
- Decrease the beam spot of the H6 Beamline
 - Study different layouts of new quadrupoles to create a new focus
- Accurately predict what we are going to create
 - Simulate multi- species beam distribution using BDSIM/GEANT4 and FLUKA

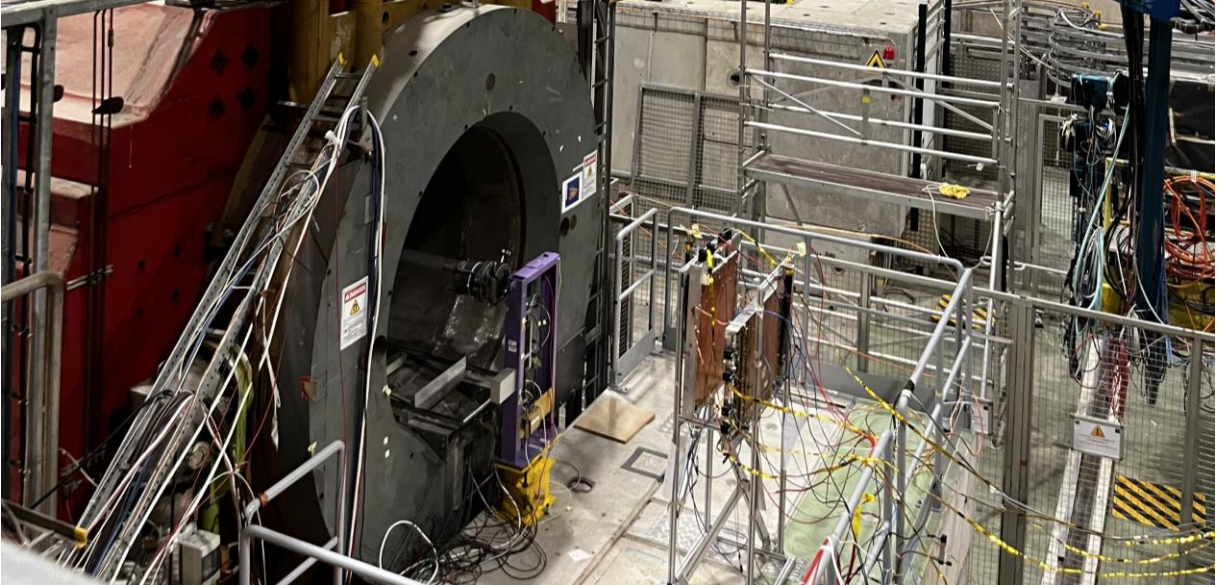
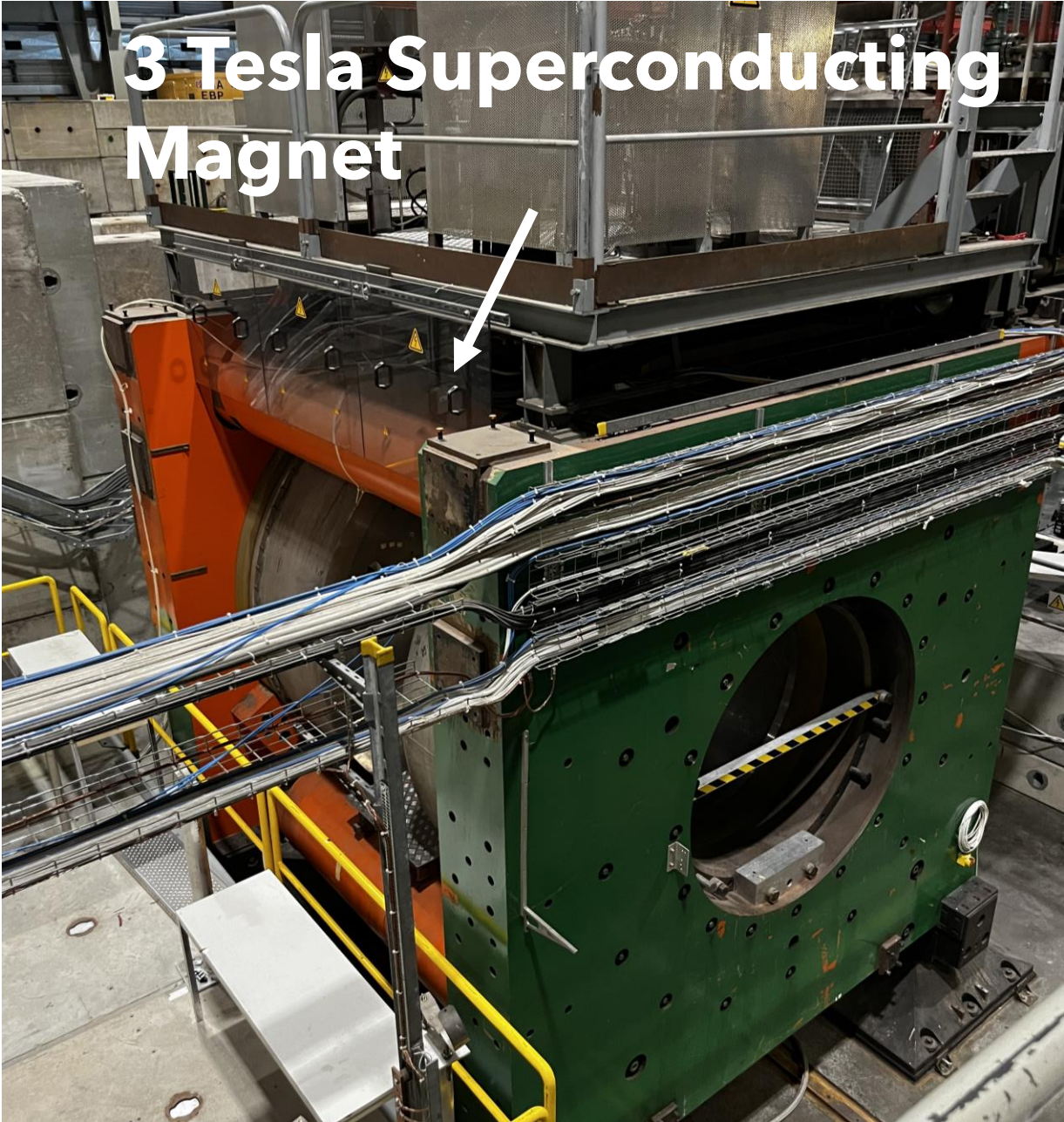


Thus Far

- A brief introduction to accelerator physics
- Found magnet strengths for varying focal points
- Created utilities to discern the envelope of the beam as it progresses through a lattice

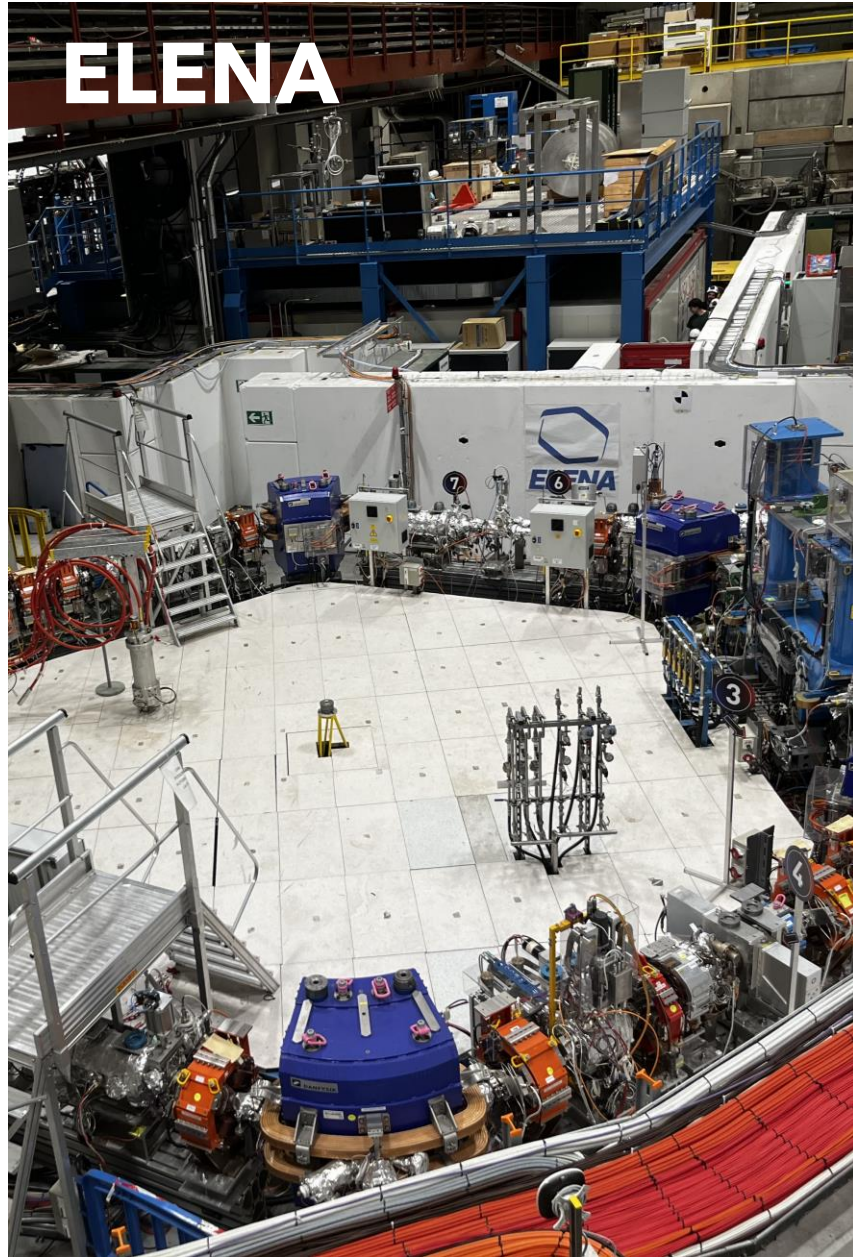
Beam Envelope throughout sequence



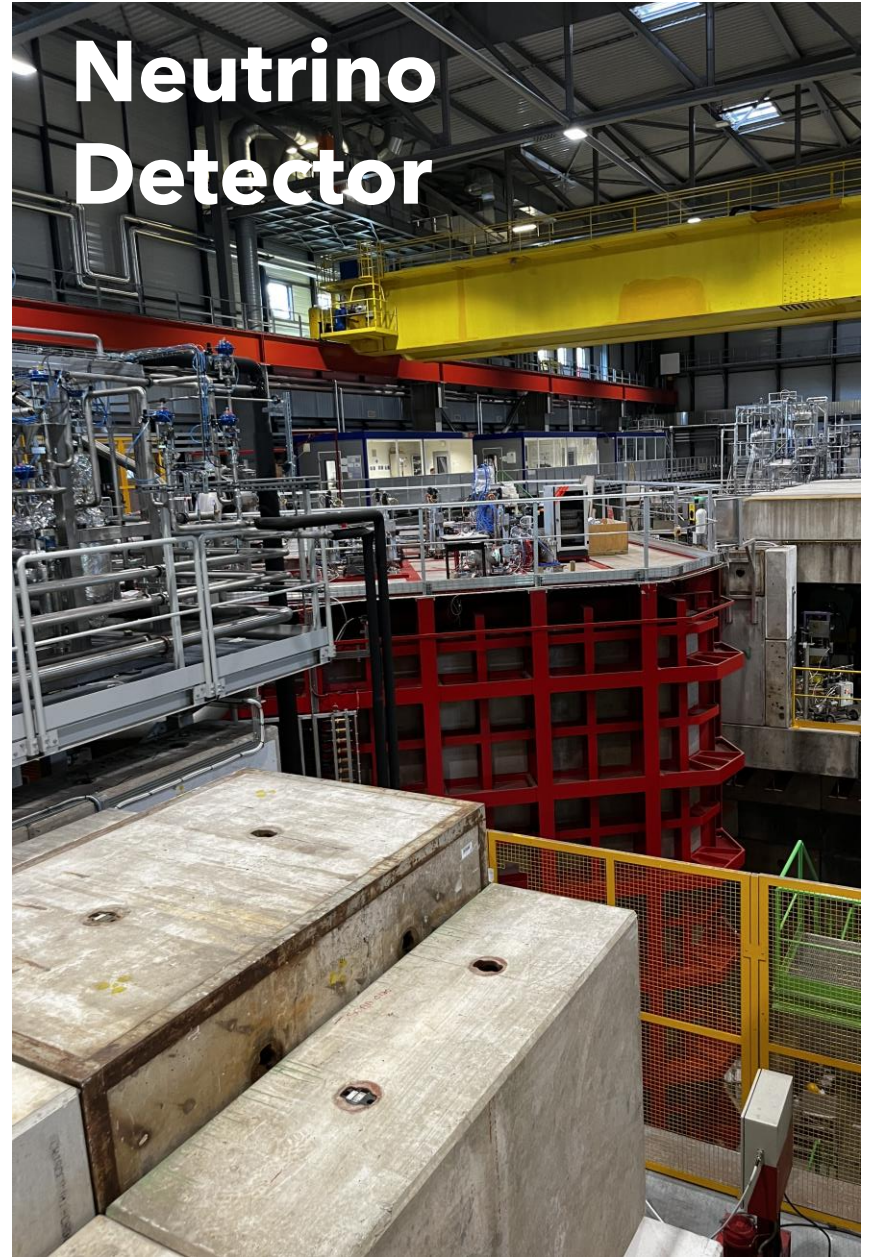




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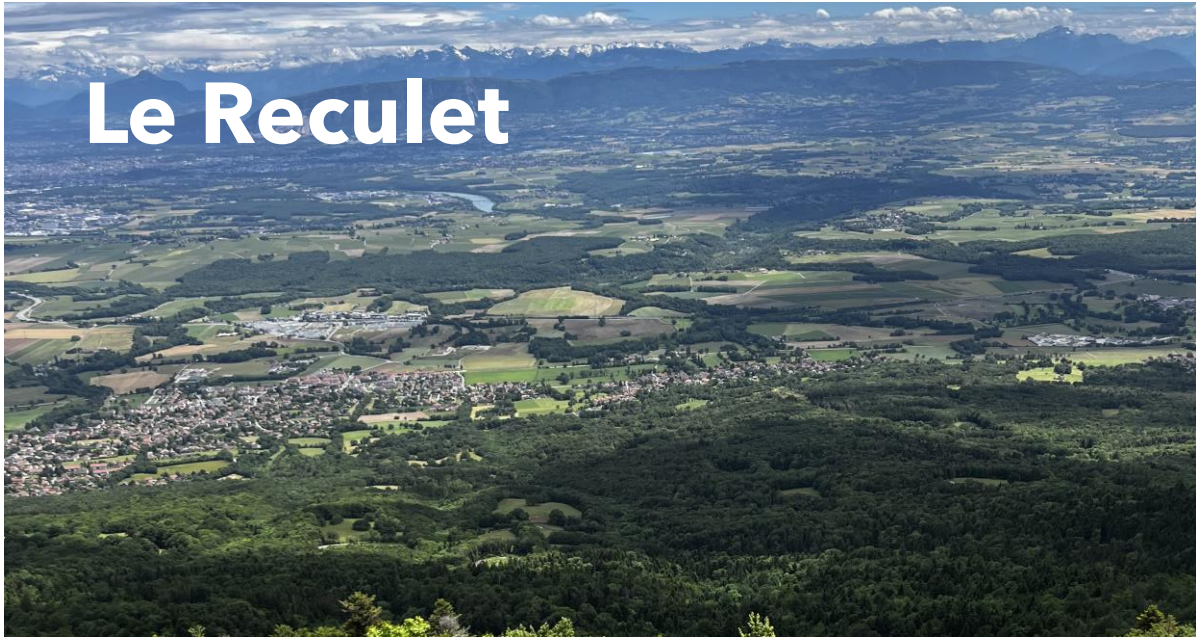
Neutrino
Detector



CCC











The bears <3

