

MAGiC: STAP update October 24



Human Resources on-site

- Engineer:
 - Moritz Braun has started in June
 - Spent a week at LLB in July and is now fully operational.
- Instrument scientist position:
 - Position is filled: Denis Vasiukov
 - Start on December 1st
 - Transition phase will last a few months
- IPL support: Egi Kuleci
 - Excellent support from NSS IPL
 - Supervises and organises the local activities in coordination with Moritz and Sergey

Design activities

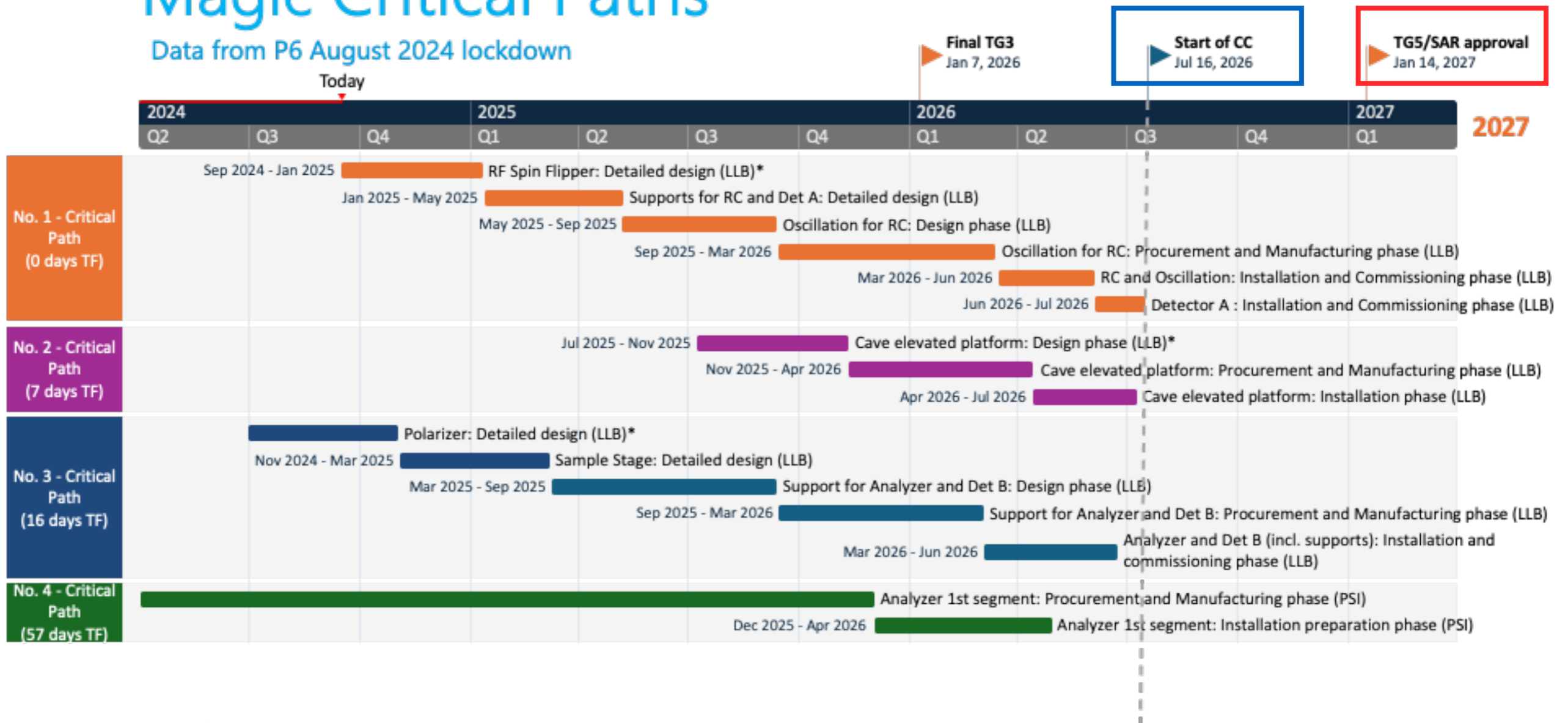
- Moritz at ESS and a Vincent at LLB
- Additional support possible:
 - Shared designer (TREX, SKADI, MAGiC)
 - JIRA based system with NSS design team
- List of components to design generated
- To be transferred to ESS

Re-planning

- Meetings from May to September
- Technical meetings to properly define the instrument team and ESS boundary

Magic Critical Paths

Data from P6 August 2024 lockdown

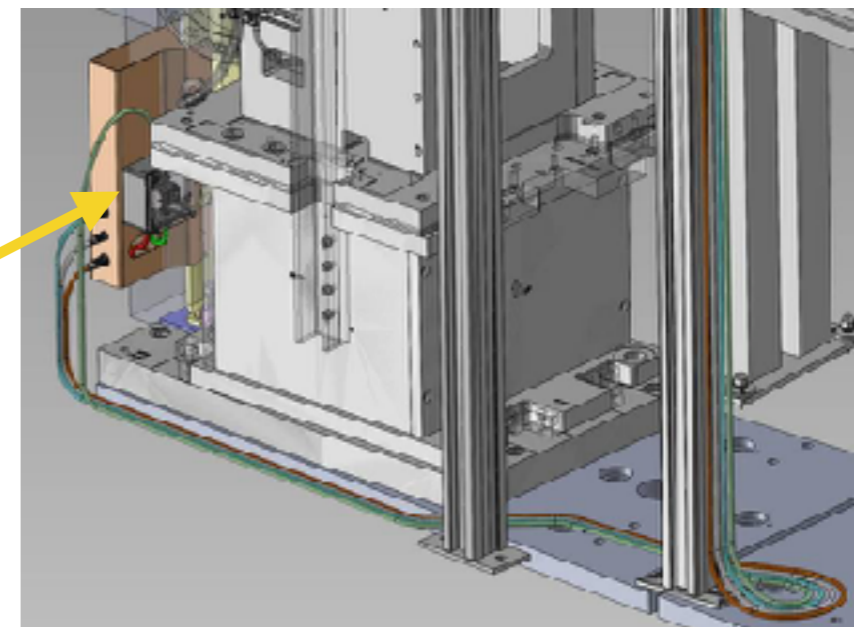
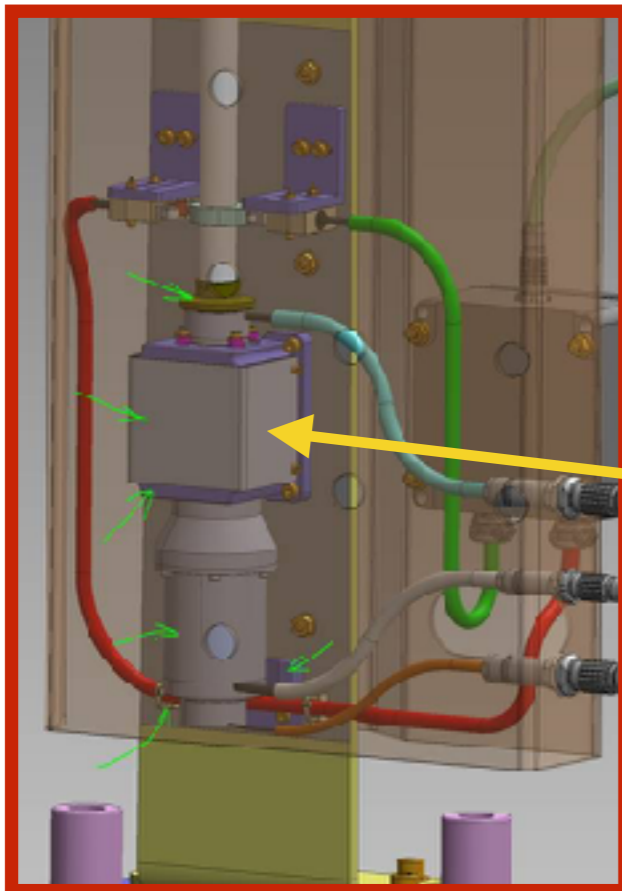
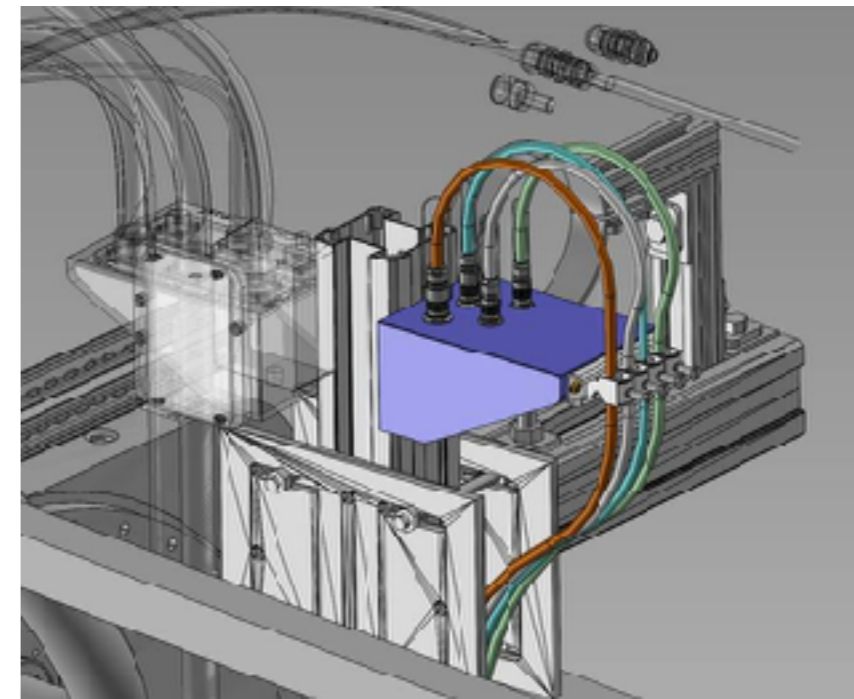
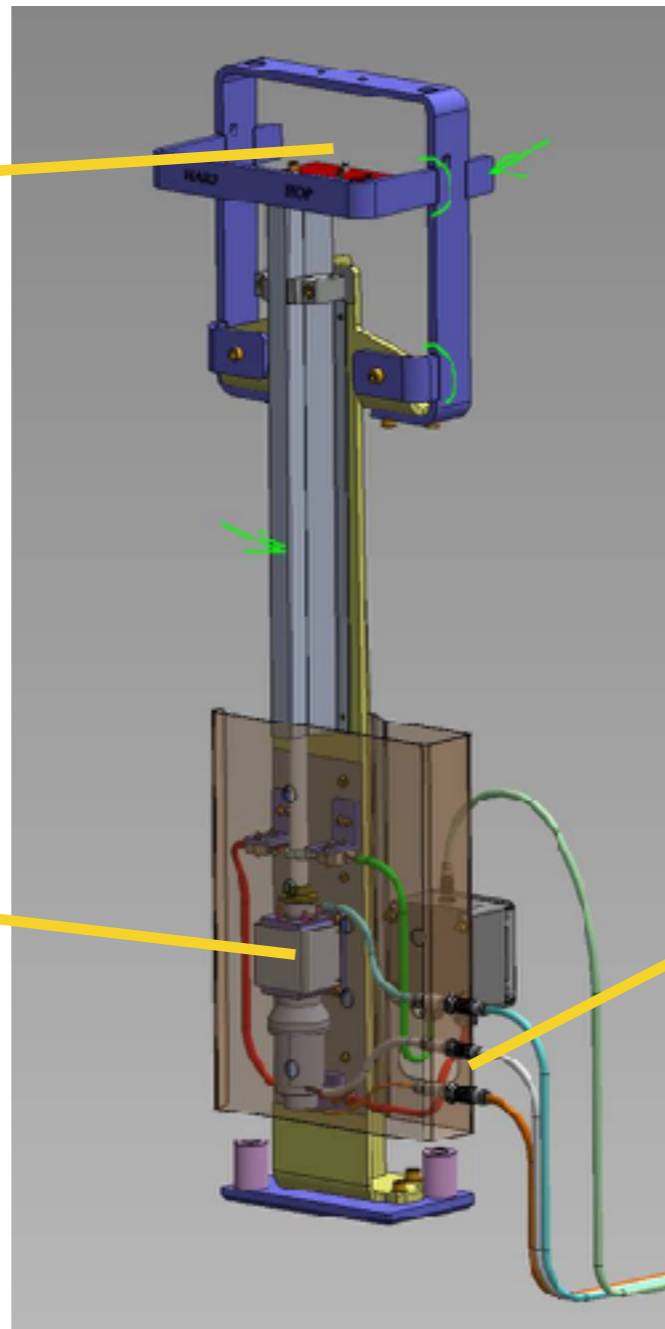
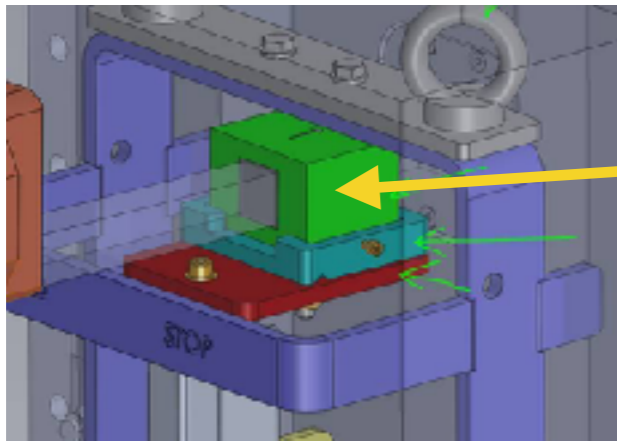


Design phase ends at CDR approval
 Procurement and Manufacturing phase ends at FAT closure of open points
 Installation and Commissioning phase ends at SAT approval
 TF: number days of total float to Instrument's TG5

* Constraints on design resources
 Note: 2nd segment of Analyzer is part of the instrument scope but currently not linked to TG5 in P6

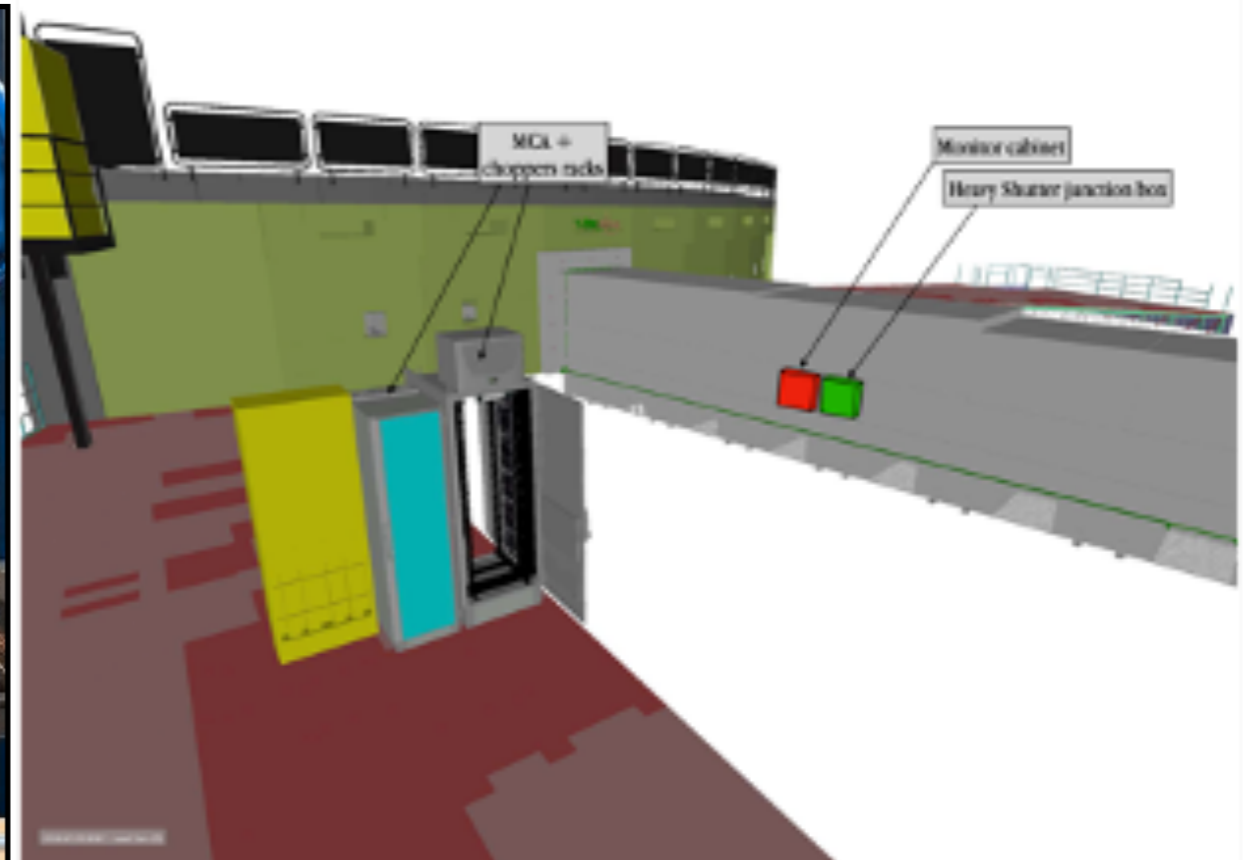
Solid state bender

- All components at LLB for FAT
- Interface with MCA and installation plan TBD



Monitors (cave & bunker)

- Monitors re-tested at PSI together with common project ones
 - Monitors are OK
 - Q-gate documentation ready
 - CUP interface discussed
 - Installation binder created



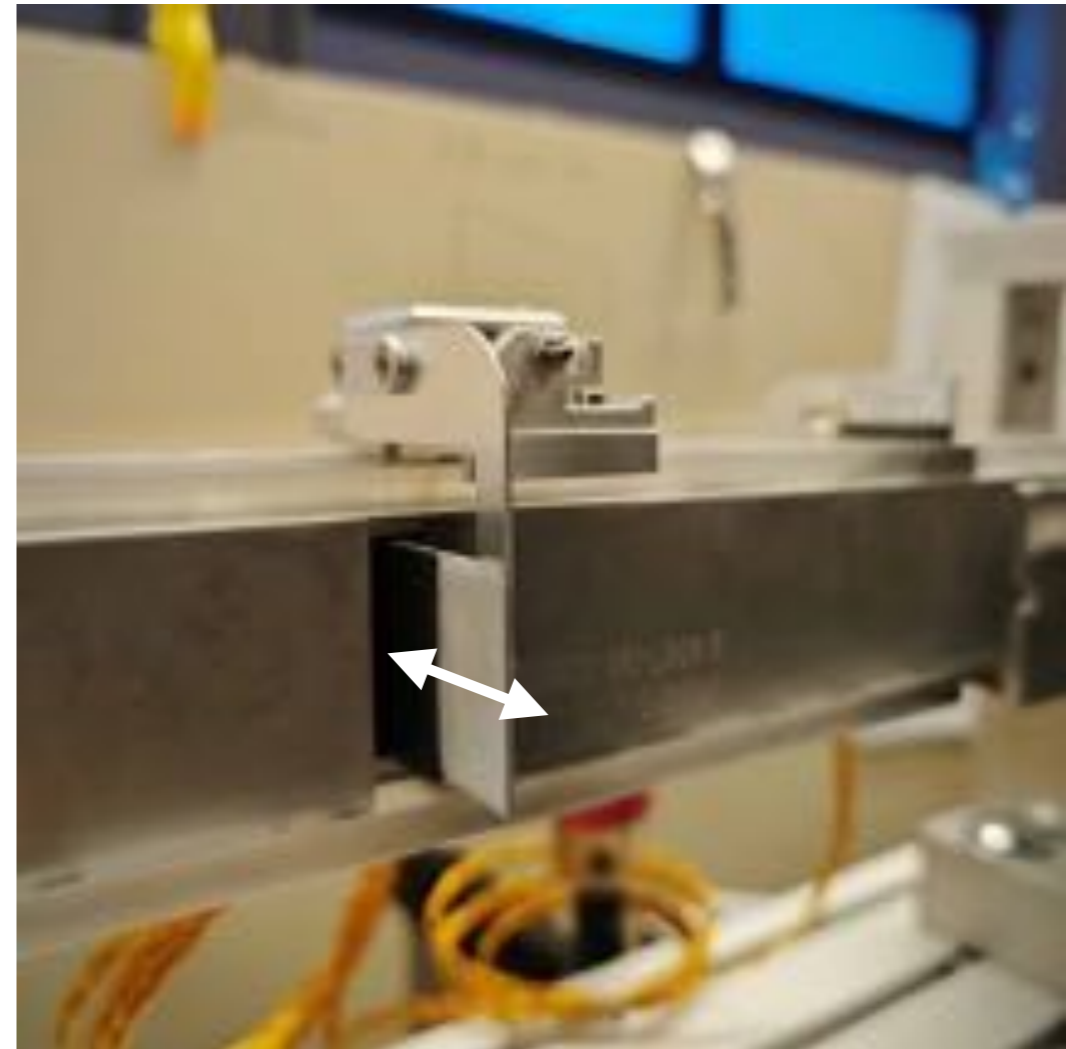
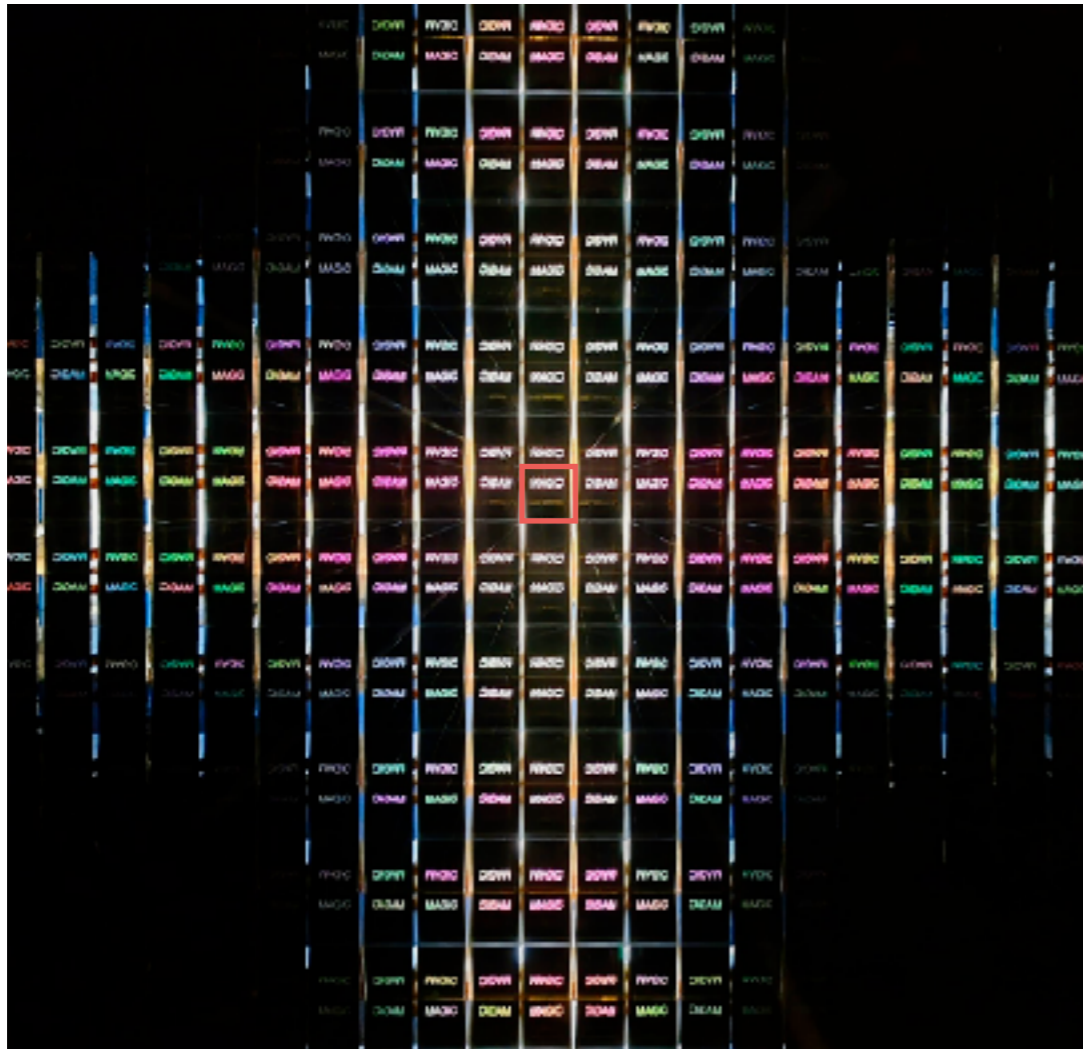
Choppers

- BC Chopper installation initiated => Q-gate and IRR process
- FE Chopper
 - FE chopper assembly to follow together with monitor and bender
 - CUP interface discussed



Guide system

- Complete guide system at ESS in crates.
- FAT for last Mirrotron part on October 10th
- Slits integration checked for all sets



HS & VH

- Heavy Shutter
 - Q-Gate in progress
 - Documentation missing
 - Hazard analysis
 - Neutronics report

- Vacuum Housing
 - Release in November, delivery in June-25
 - Current plan => installation during bunker reopening

Experimental cave

- Cave fully built
- SAT approved by CNRS in early September



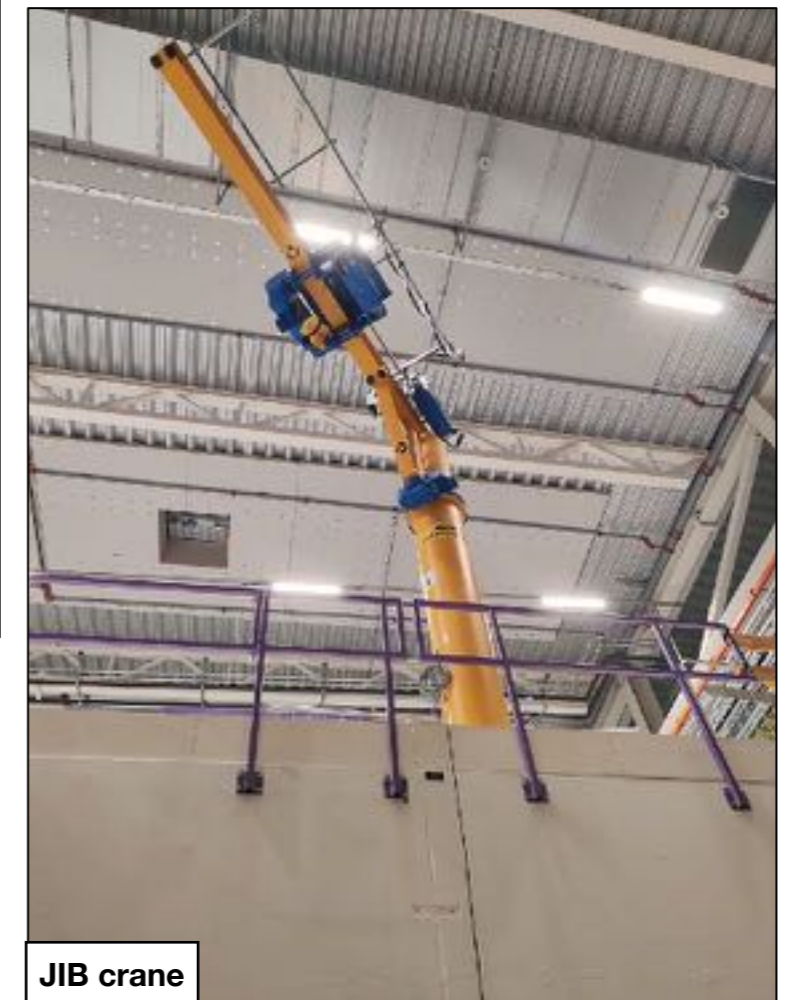
Tanzböden



Control Hutch



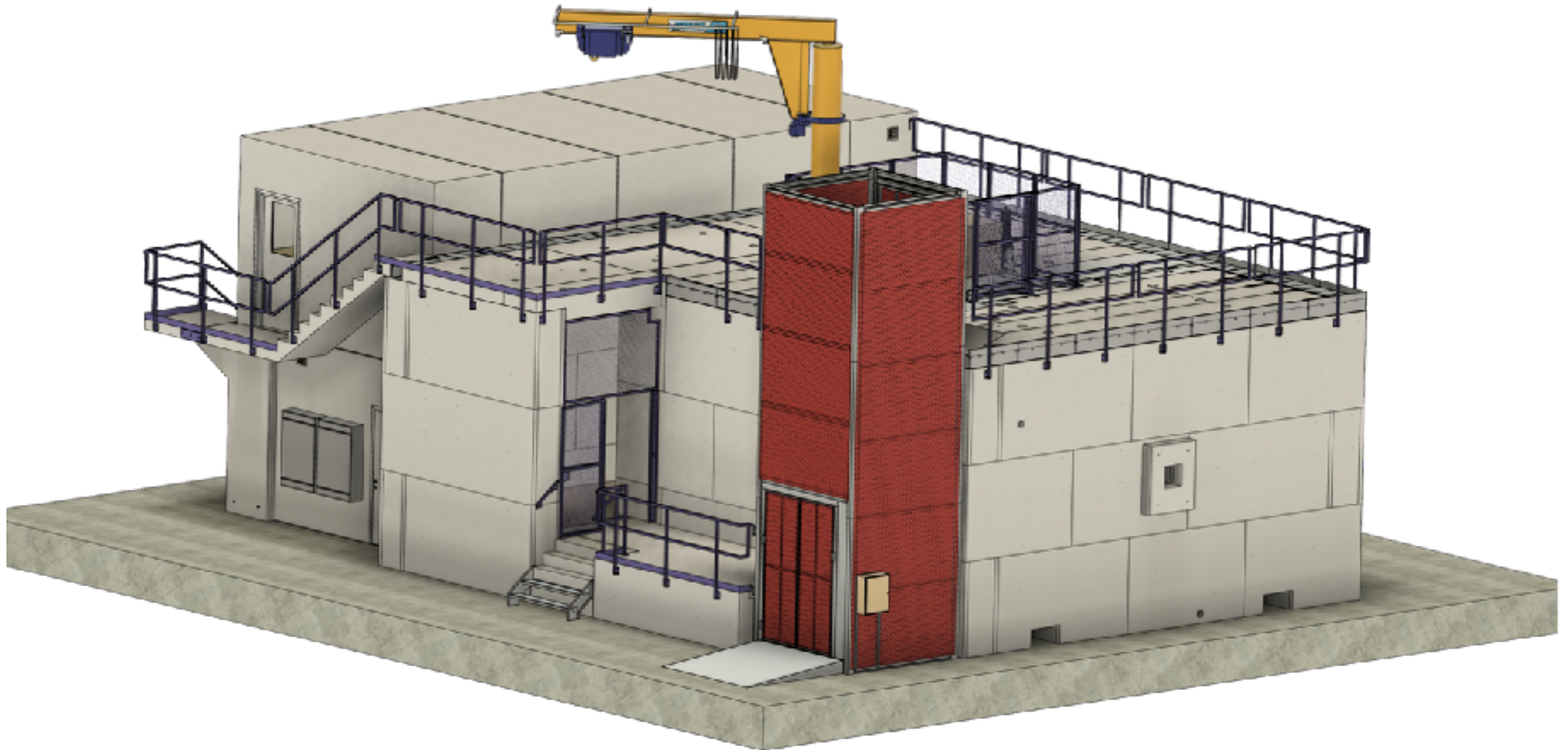
Cave overview



JIB crane

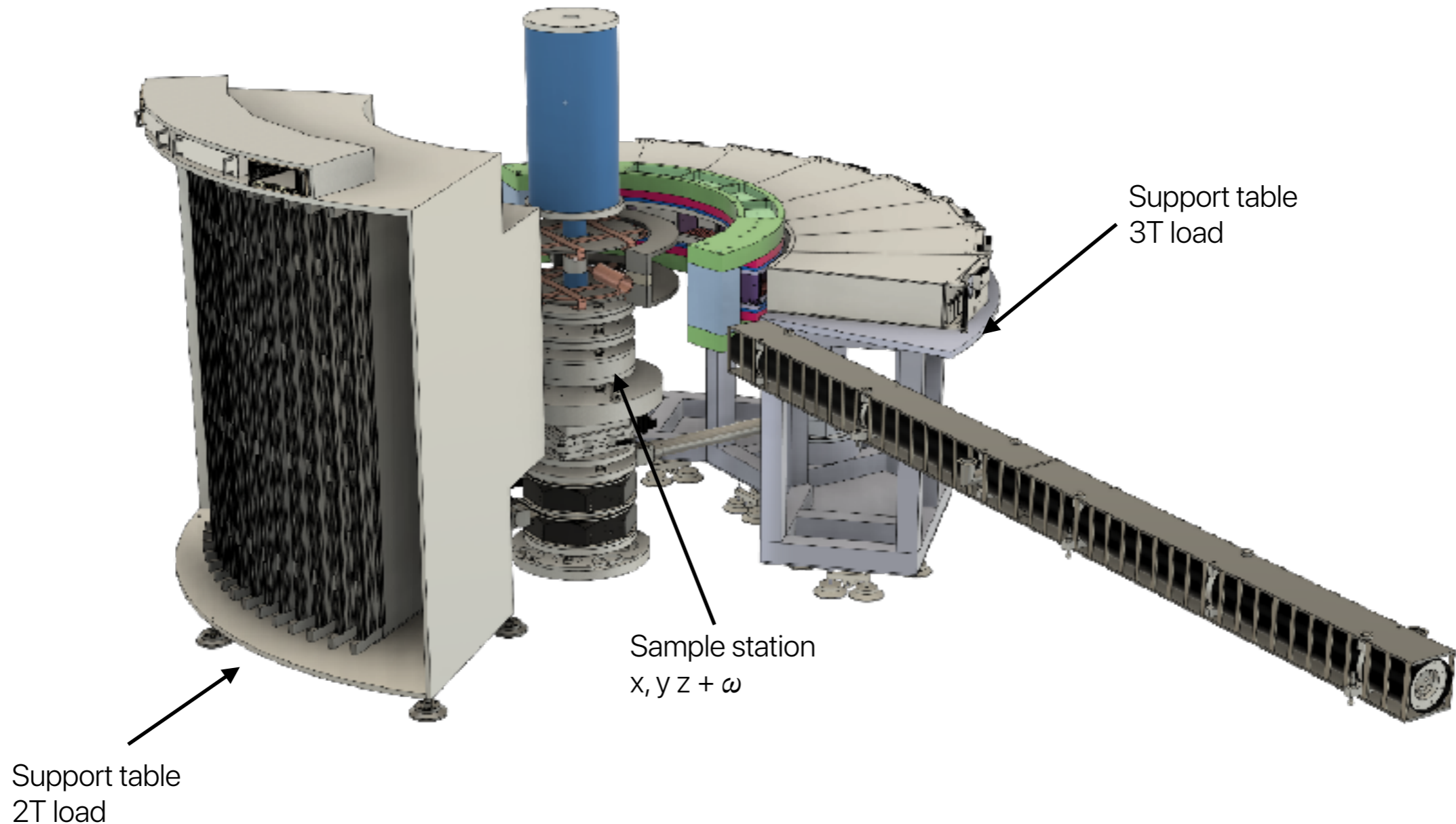
Elevator

- (final) Design review with the supplier
- CDR with ESS to follow before installation



Sample station and support

- Radial collimator tender released (15th of November)
- Both detector supports on the critical path
 - good candidates for support from NSS



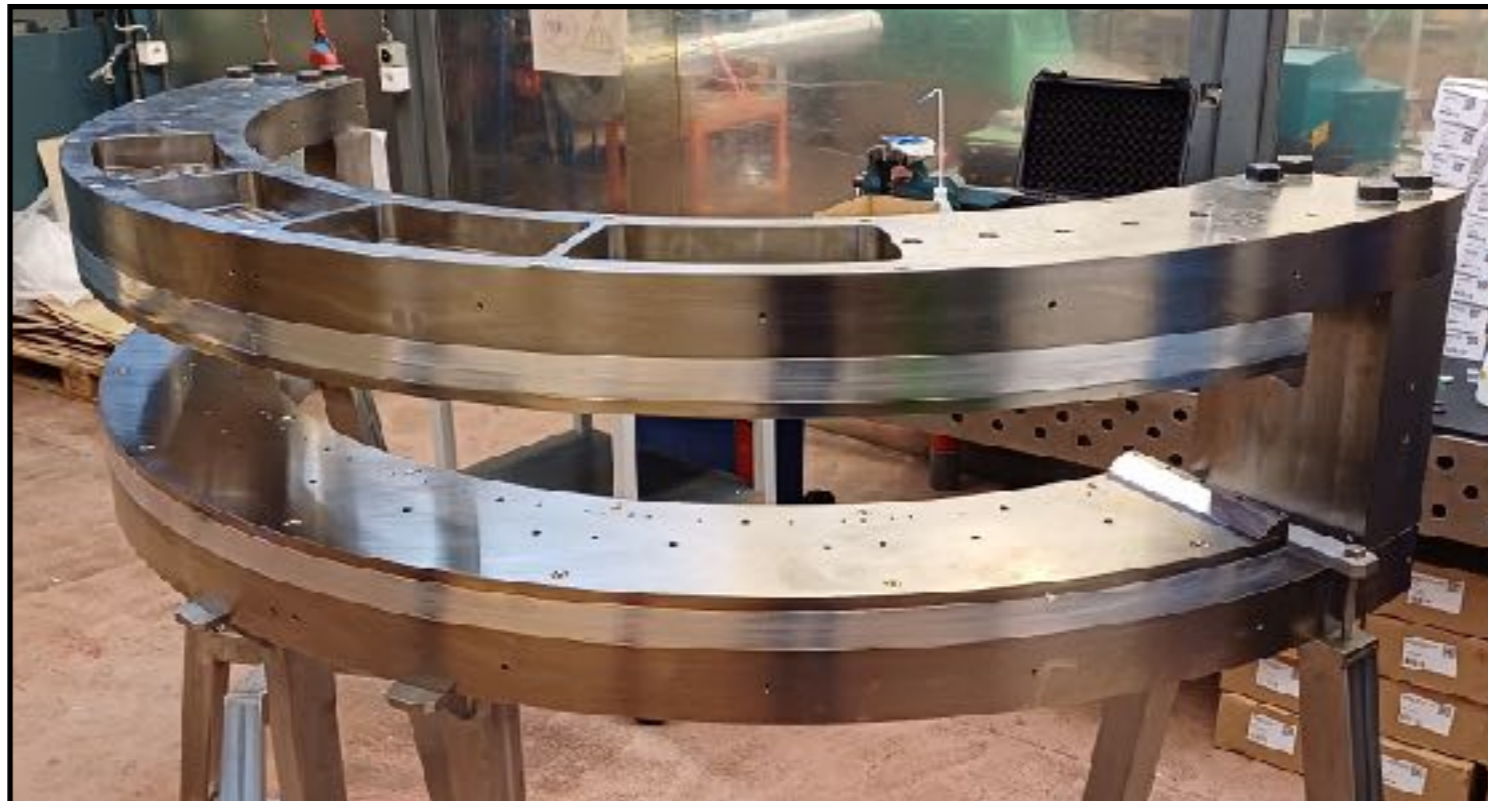
Detectors



- Two meetings with detector group
 1. Racks and cabling
 2. Network requirements
- Power supplies and data cables
- Fiber boxes location
- Network loops
- Upgrade strategy

Polarization analysis (PSI)

- 100% coverage agreed between PSI and ESS
- Manufacturing in progress
- First FAT in progress at PSI
- Update to come for the end of 2024 on detailed planning



Components list

- Ready/installed
 - NBOA
 - Solid state bender
 - FE choppers
 - Monitors
 - Guide super-mirrors
 - Heavy Shutter
 - BC chopper
 - Beam-line shielding
 - Collimation slits
 - **Experimental Cave**
 - Detector B
 - Cryostat
 - **Control Hutch**

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- Missing
 - **Vacuum Housing** Critical for IB
 - **Detector supports**
 - **Beam-stop** NSS support ?
 - **Elevated platform**
 - **Sample station**
 - **Radial collimator**
 - **XYZ** In progress
 - **Elevator**
 - **Detector A**
 - Spin Flipper
 - CUP, CEP, CMCA

Next STAP

- Denis will be in charge 😊
- Report on installation activities
- Analyser update
- Thank you for your support !