

MAGiC progress report

October 2024 STAP meeting

This report highlights the progress and changes made on the MAGiC instrument since the last meeting in April 2024.

1. Project management

Personnel

- 1) The engineer (Moritz Braun) is now working on site and well integrated into the NSS. Management of on-site activities are much easier since then.
- 2) An instrument scientist has been found (Denis Vasiukov). He will start on December 1st and will progressively take responsibility for all activities non CNRS related.

Re-planning

- The re-planning has been approved on September 13th. A new TG5 date is set to 02/2027. The team is working actively to keep momentum and achieve the installation plan.

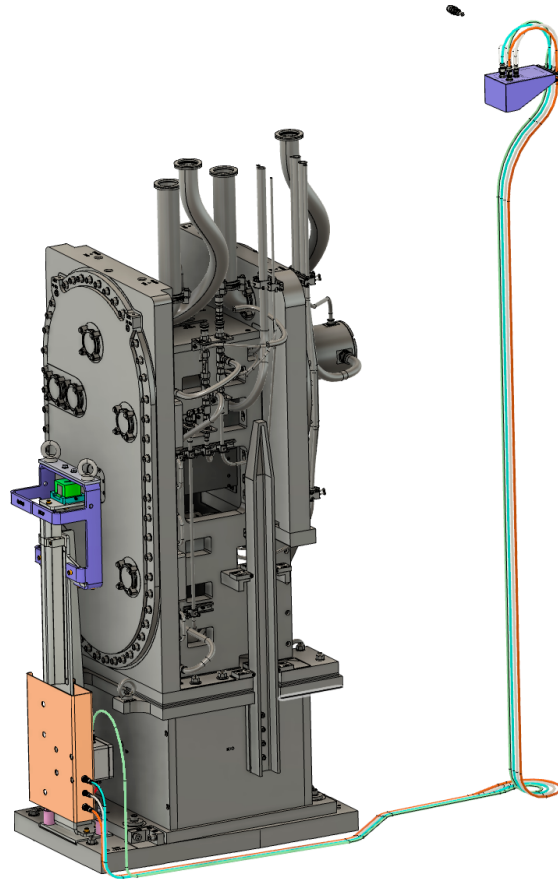
Design activities

- Help from a shared designer (SKADI, T-REX, MAGiC) is expected to take non-critical design activities. Knowledge transfer with instrument team is required.
- A JIRA based system is in place at ESS for the NSS designer team to take design activities from instrument team. The detector supports are excellent candidates.

2. Progress on individual components

Solid State Bender

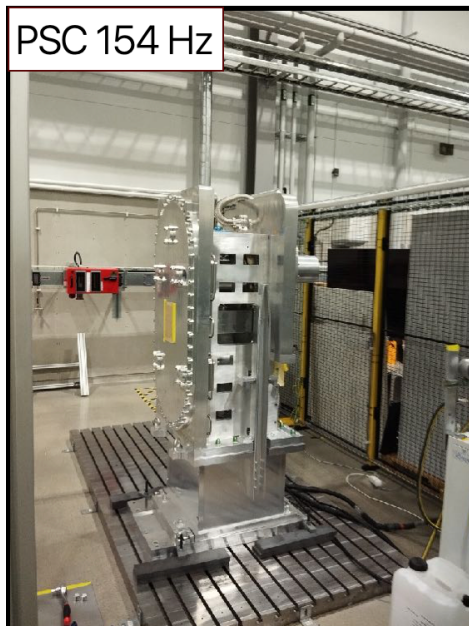
The SSB and support structure are at LLB for FAT. All components are delivered and assembled. Motion control is the next step before delivery to the ESS.



Choppers

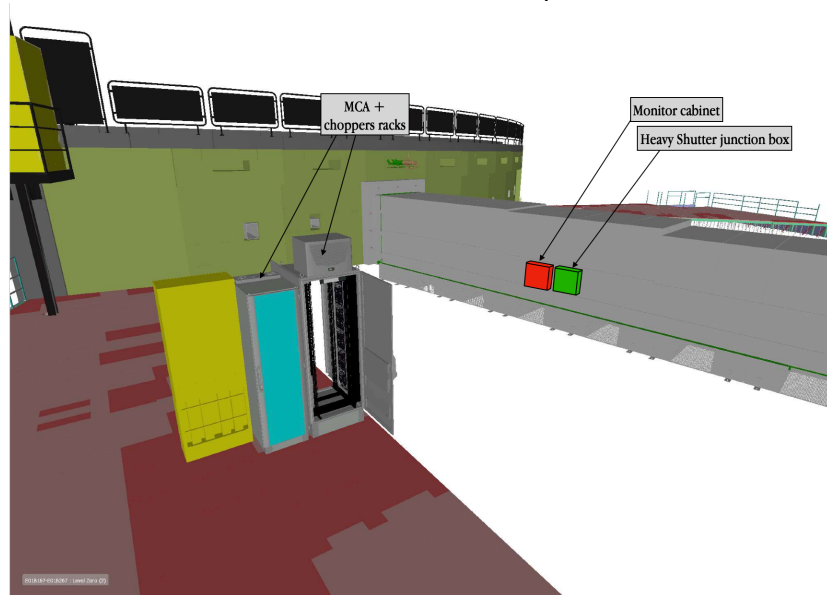
BC chopper installation process has been initiated at ESS. An IPL is in charge and in close collaboration with the common project team.

Installation of the FE choppers assembly is still pending.



Beam Monitors

After the first test at ISIS, the monitors have been tested at PSI in early September. Tests were conclusive and the in-Bunker monitor installation process has been initiated (Q-gate).



Neutron Guide system

FAT for the last guide elements (second half of E02) has been successfully passed on October 11th. Guide delivery is in progress.

Slits integration has been checked and was successful. Final integration will take place at ESS before guide installation.

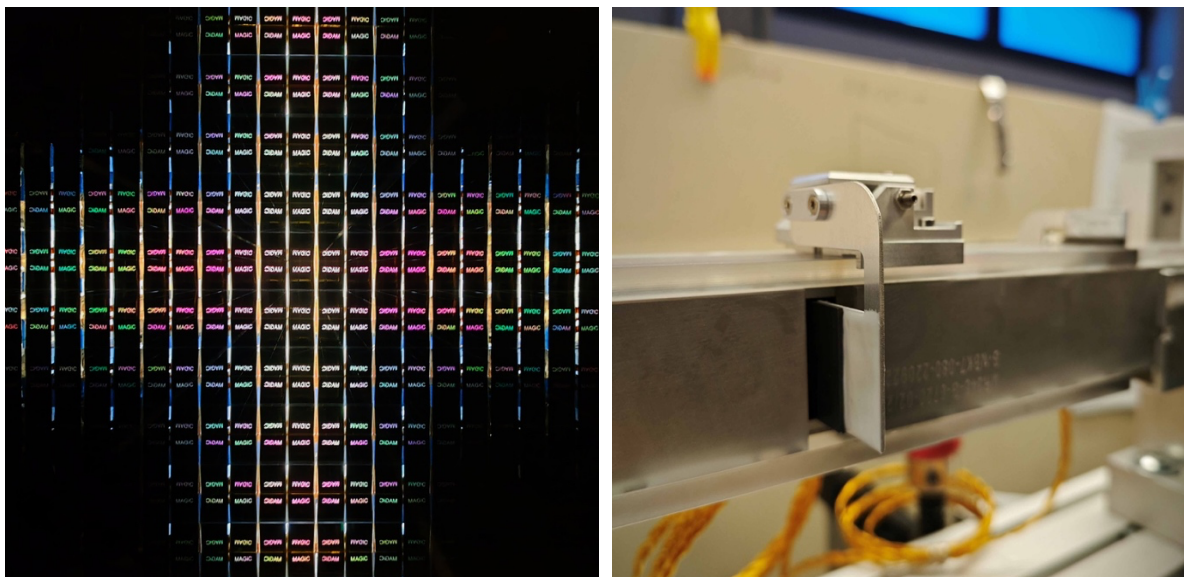
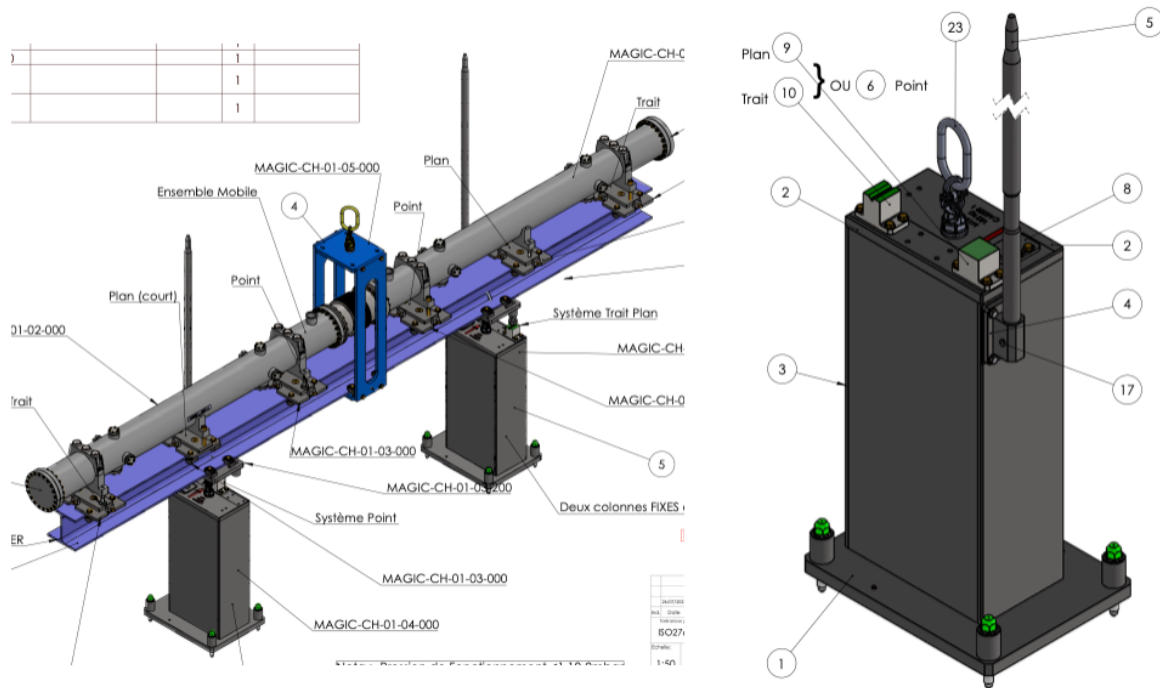


Figure 1: (left) MAGiC multiple reflections in an 80x80 mm guide element. (right) Slits integration.

Vacuum Housing

Release in May 24 of the tender has not been achieved. Documentation is finalized and awaiting validation by CNRS management. New delivery date is June 25.



Detectors

Detector B is at ESS waiting for the completion of the detector support structure to progress with integration and installation.

Detector A delivery has been shifted to 2025 to align with the MAGIC schedule and prioritize other projects. This will not affect the installation plan as Detector installation is gated by other deliverables.

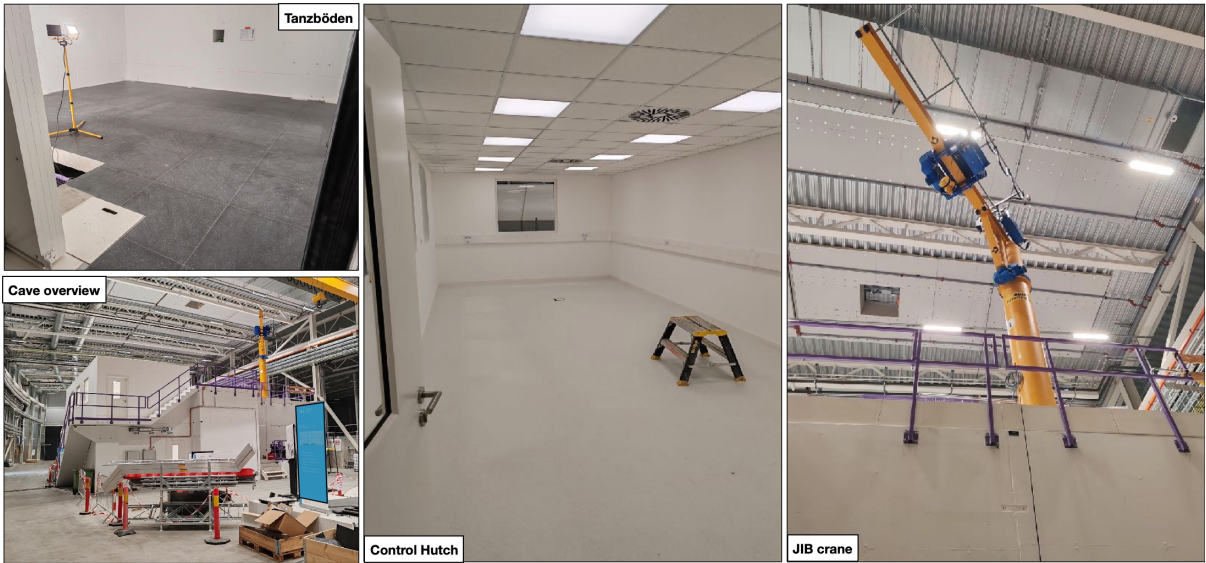
Analyzer

100% coverage has been agreed between ESS and PSI.

Manufacturing and testing are in progress. Delivery of the first segment is not on the critical path anymore.

Experimental Cave

Cave installation is finalized, and all activities are now validated by CNRS.



Elevator

Design is frozen for installation early next year.

