

# MAGiC progress report

## April 2024 STAP meeting

This report highlights the progress and changes made on the MAGiC instrument since the last meeting in October 2023.

### 1. Project management

#### **Personnel**

- 1) The process to hire an engineer on site has been restarted. Interviews took place in end of March 2024 with two promising candidates. An offer has been made and we hope for an effective start during summer.
- 2) The job opening for the Instrument scientist was not successful with no candidates fitting the profile. The position has been reopened and readvertised through multiple channels.

#### **Re-baselining**

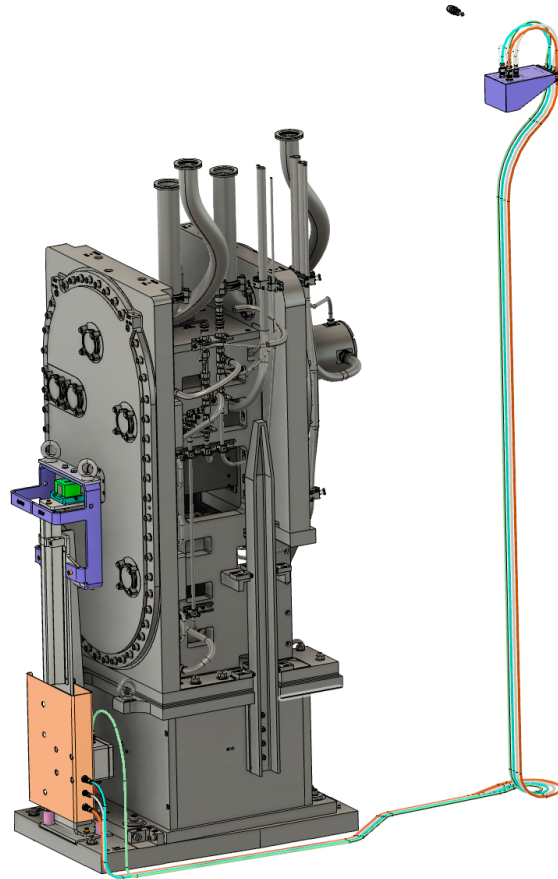
The instrument team is working with ESS to go through the re-baselining exercise. The meeting is schedule for the end of May 2024 with a first batch of documentation being sent on the 12<sup>th</sup> of April for multiple rounds of discussion. The meeting will cover:

- The feasibility of the installation plan;
- Discussion with the common project to align schedules;

### 2. Progress on individual components

#### **Solid State Bender**

The solid-state bender is still in manufacturing. All components and machining for the SSB support structure have been ordered and/or are in manufacturing as well. All parts will be delivered on time for installation in-Bunker.



### Choppers

A failure of the carbon disk hub occurred during testing. Work is in progress at Airbus to fix the problem and deliver a set of functional disks at nominal speed. Installation has been postponed to after summer 24.



## Beam Monitors

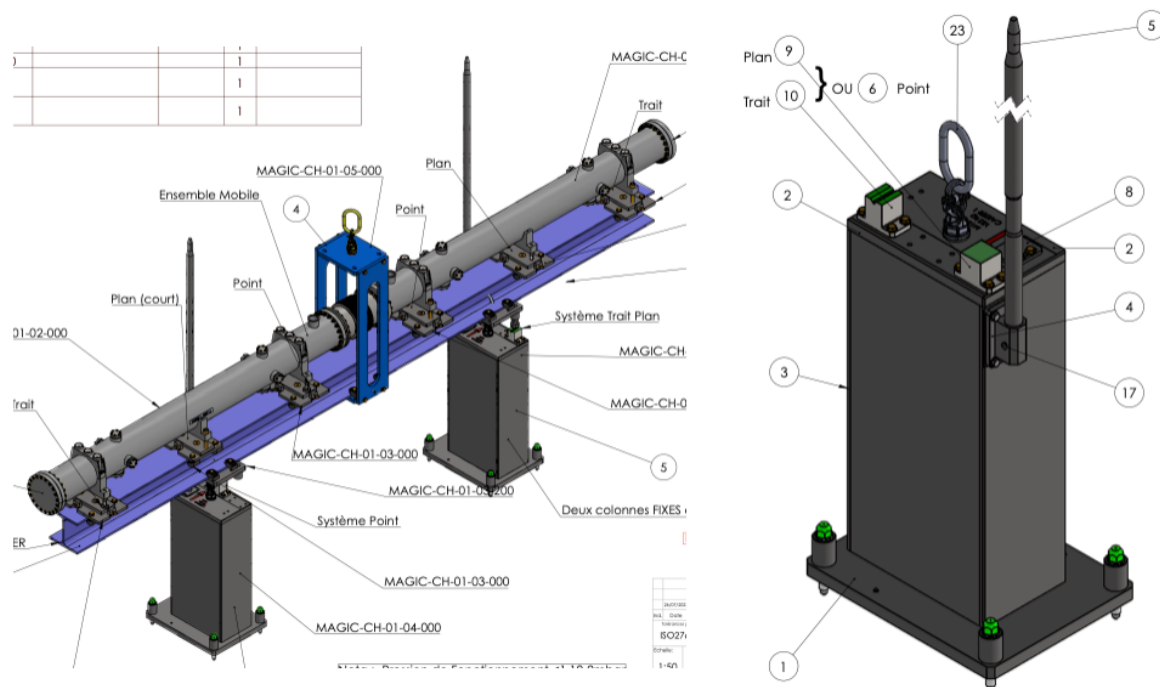
The in-bunker and cave beam monitors for MAGIC were tested at ISIS. The collected data is being analyzed.

## Neutron Guide system

All guide elements have been delivered to the ESS at the exception of the second batch of the Out of Bunker section. FATs for the remaining elements are scheduled for July 24 by Mirrotron.

## Vacuum Housing

The tendering process is in progress for the in-Bunker VH elements with CNRS since completion of the manufacturing drawing by the LLB CAD team. After some delay with CNRS tendering team, release is now expected for May 24 for a delivery in January 25. Installation of the guide system before bunker closure is at risk.



## 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

Analyzer manufacturing will start this month, RFM is set for 22.04.2024.

Discussions with ESS are still ongoing on the total coverage (75% vs 100%).

## **Experimental Cave**

Cave installation is almost completed. Final inspection by CNRS is scheduled on the 2<sup>nd</sup> of May. The installation process went as expected with minor logistic difficulties.



*Figure 1: (left) granite tiles installed and ready for polishing. (right) experimental cave roof installed, and fences delivered.*

## **Elevator**

Installation process to be discussed with supplier. A visit on site is required to define all steps and requirements from ESS. This will hopefully be done at the same time as the cave final inspection in May.