



MAGiC: STAP update April 24







Instrument overview SHIELD **Control Hutches** JIB Crane **Delivered** sub-TG3 passed Not started **Experimental Ca** MSHIELD MIRR•TR•N OoB Guide Polarizer Swiss Neutronics + Flipper loss **BC** Chopper **Beamline Shielding FE Choppers Heavy Shutter** PAUL SCHERRER INSTITUT Cryostat JÜLICH **Analyzer Detector B** Sample station Collimator **BWI** Guide **Detector A** Swiss Neutronics **IB Guide** Swiss Neutronics VH housing **XYZ** polarization

Human Resources on-site

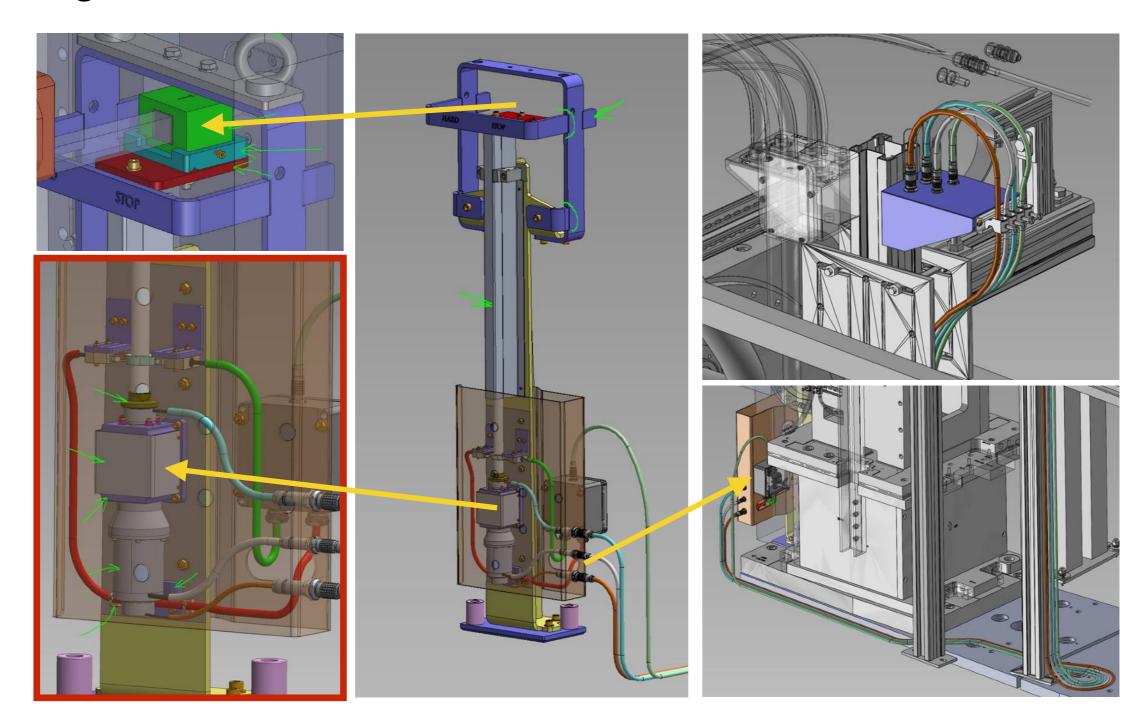
- Engineer:
 - 2 interviews on-site in late March
 - 2 excellent candidates
- Instrument scientist position:
 - First opening failed (12 candidates, 1 fitting)
 - Reopened until filled: few potential candidates to be reviewed already
- · IPL support: Egi Kuleci
 - Excellent support from NSS IPL
 - Supervises and organises the local activities for the experimental cave since November.

Re-baselining exercise

- Meeting at the end of May
- Detailed plan sent to ESS last week
- Additional files needed to give context (P&ID, overview of instrument)
- Iterative process to remove clashes, and align ressources (limited at LLB).
- Additional meetings with CEP, CUP, PSS and MCA
- New TG5 defined during meeting (2026)

Solid state bender

- All components in manufacturing
- Long lead time for motor/resolver



Monitors (cave & bunker)

- Monitors tested at ISIS with reference scintillation monitor:
 - Monitors worked!
 - Some deviations in ToF spectra
 - Insufficient electrical insulation
- Tests will be repeated at PSI after optimisation

Ionisation-Chamber

I-BM

Ionisation-Chamber

I-BM

Ionisation-Chamber

I-BM

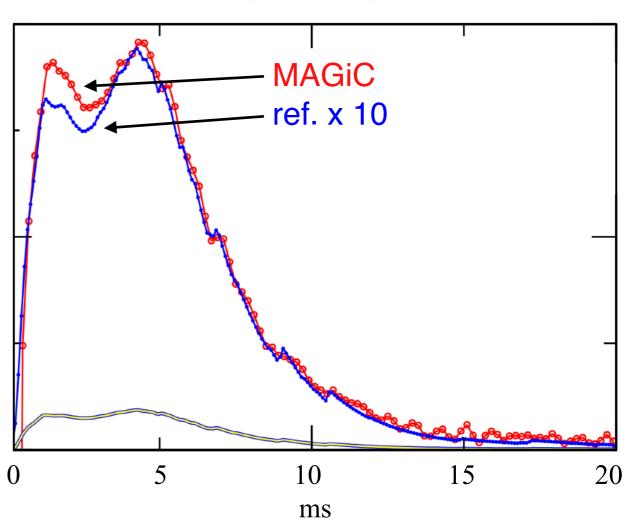
Ionisation-Chamber

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Ionisation-Chamber



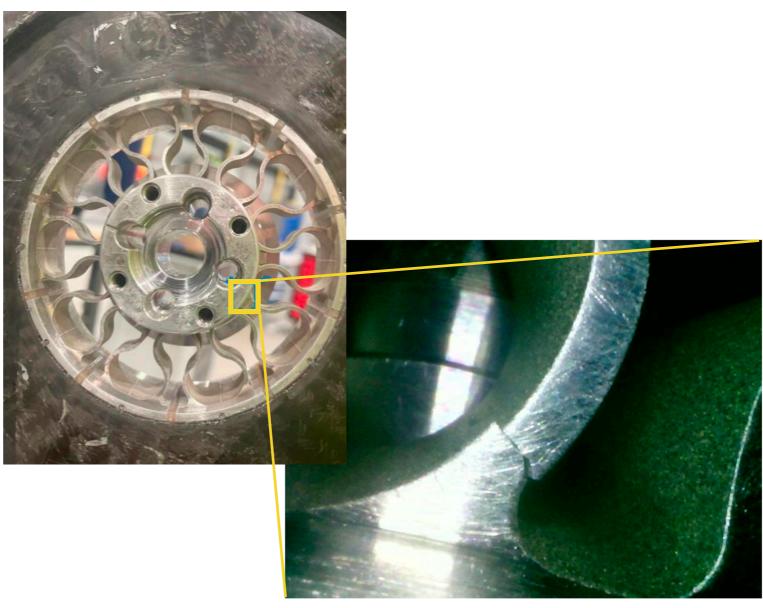
SN04

1003

Choppers

- Disks at Airbus: solution found
- · Latest update: delivery in Sep-24, installation in Jan-25





Guide system

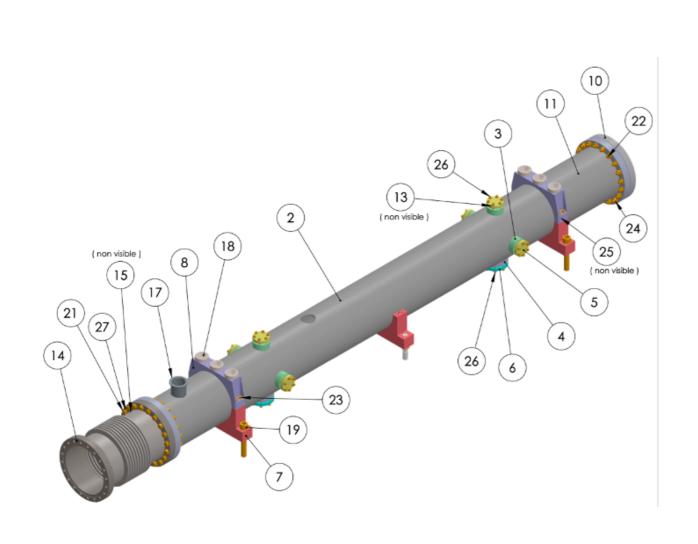
- · Final delivery scheduled for Jul-24.
- 6 months delay due to difficulties at Mirrotron. Do not impact installation plan.

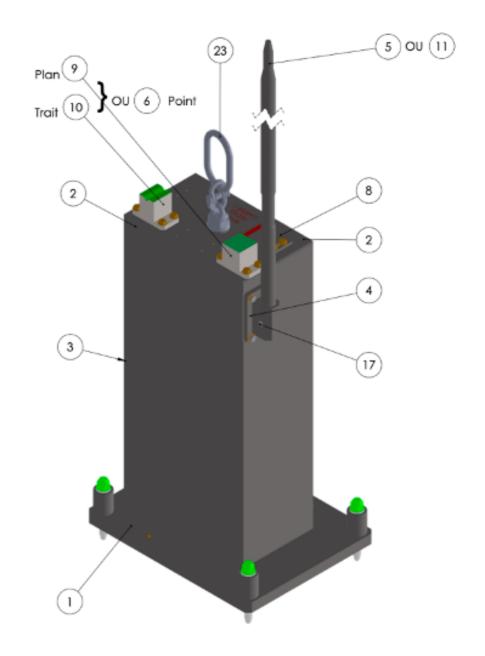




Vacuum housing

- Tendering documentation still at CNRS
- Final pass this month
- Current plan => installation in Mar-25

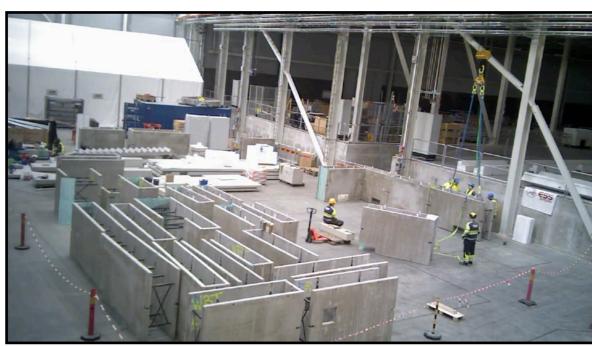




Experimental cave

- Installation start in Nov-23
- Installation end in April-24
- Final inspection on 2nd and 3rd of May



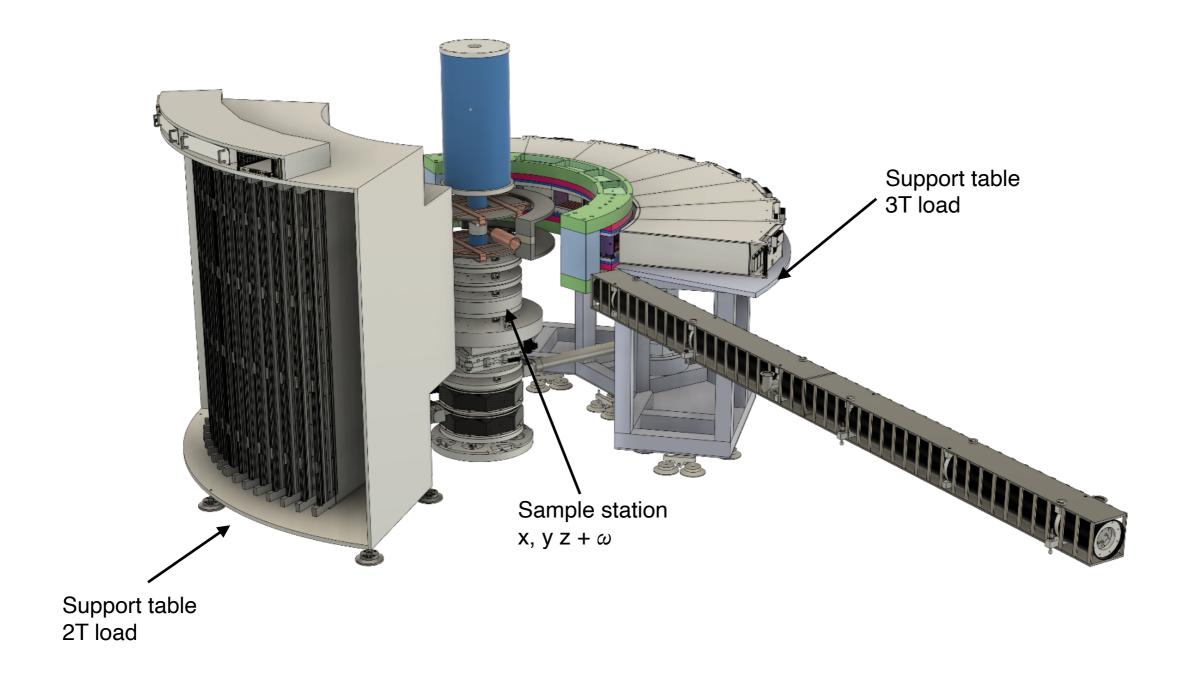






Sample station and support

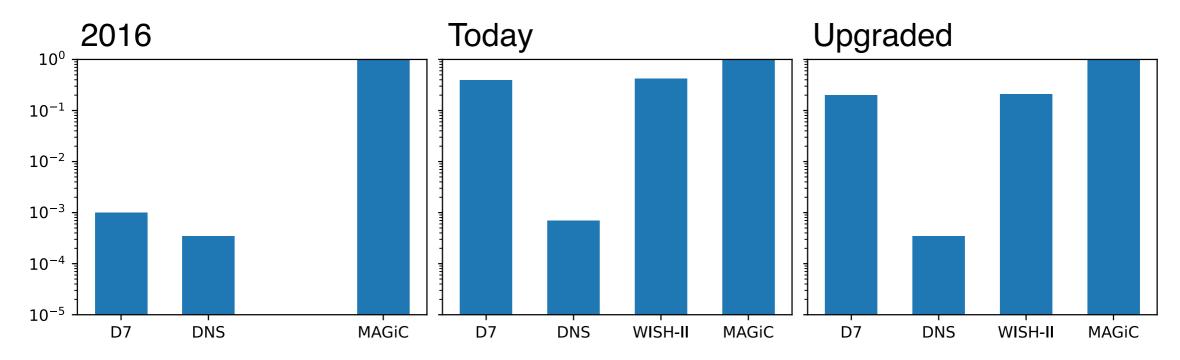
No movements on this front



Detectors



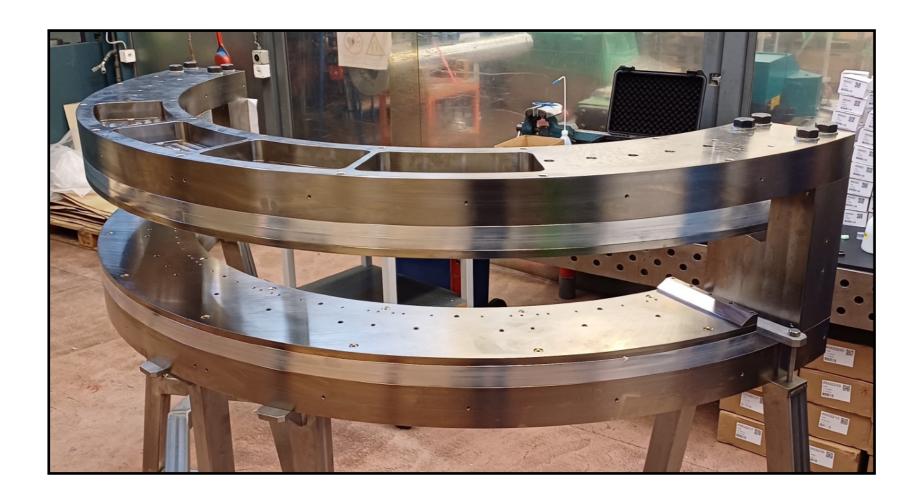
- Detector B comfortably stored at ESS
- Detector A:
 - Delivery in first half of 2025
- Instrument performance comparison:
 - WISH-II will be close to MAGiC (1/20th of flux but huge detector coverage).
 - Pushing for detector coverage upgrade



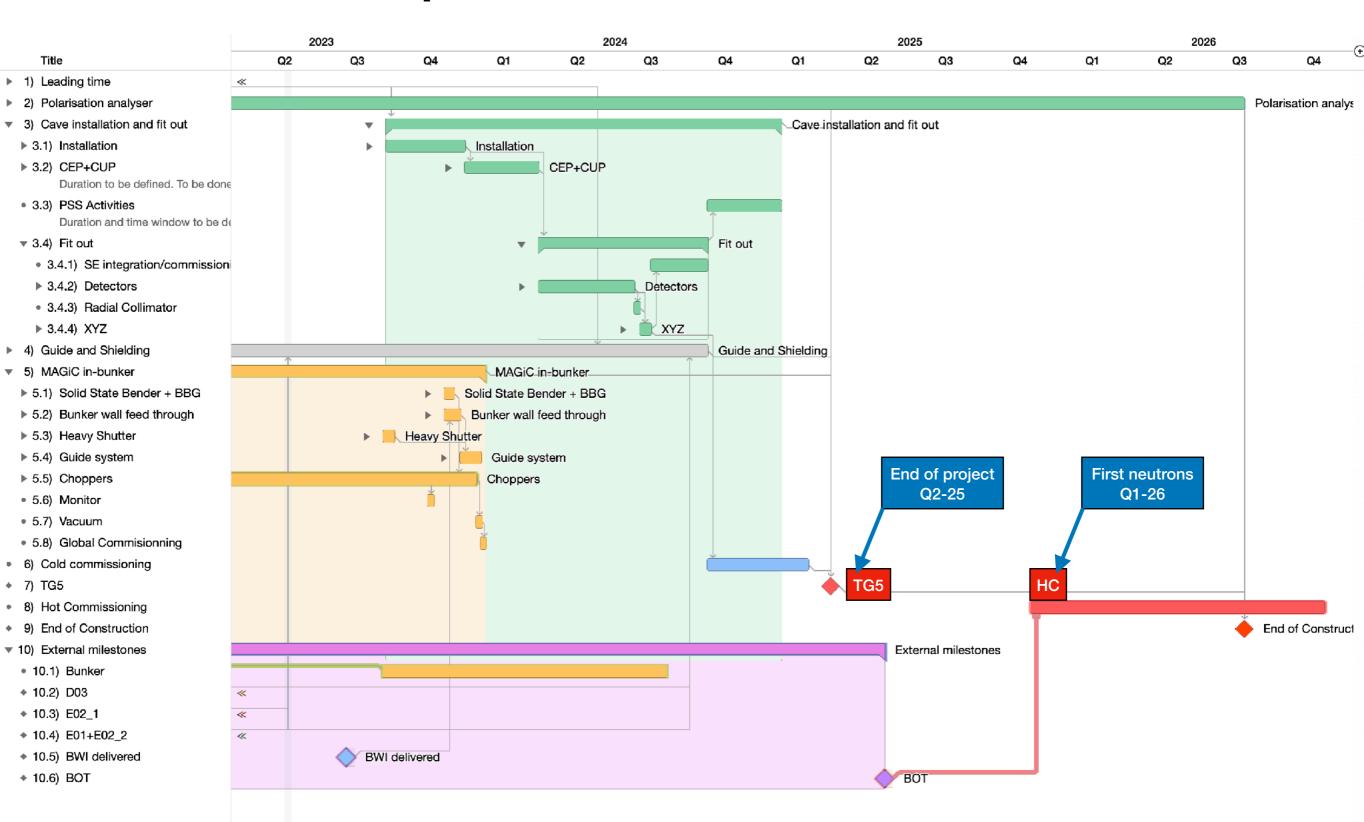
2 orders of magnitude improvement on "competitors"

Polarization analysis (PSI)

- 75% coverage offer accepted
- Discussion still in progress for 100% coverage
- Ready for manufacturing: 22/04/24
- Detailed plan in progress for re-baselining



Installation plan



Installation plan v.??

