



EUROPEAN
SPALLATION
SOURCE



JÜLICH
Forschungszentrum



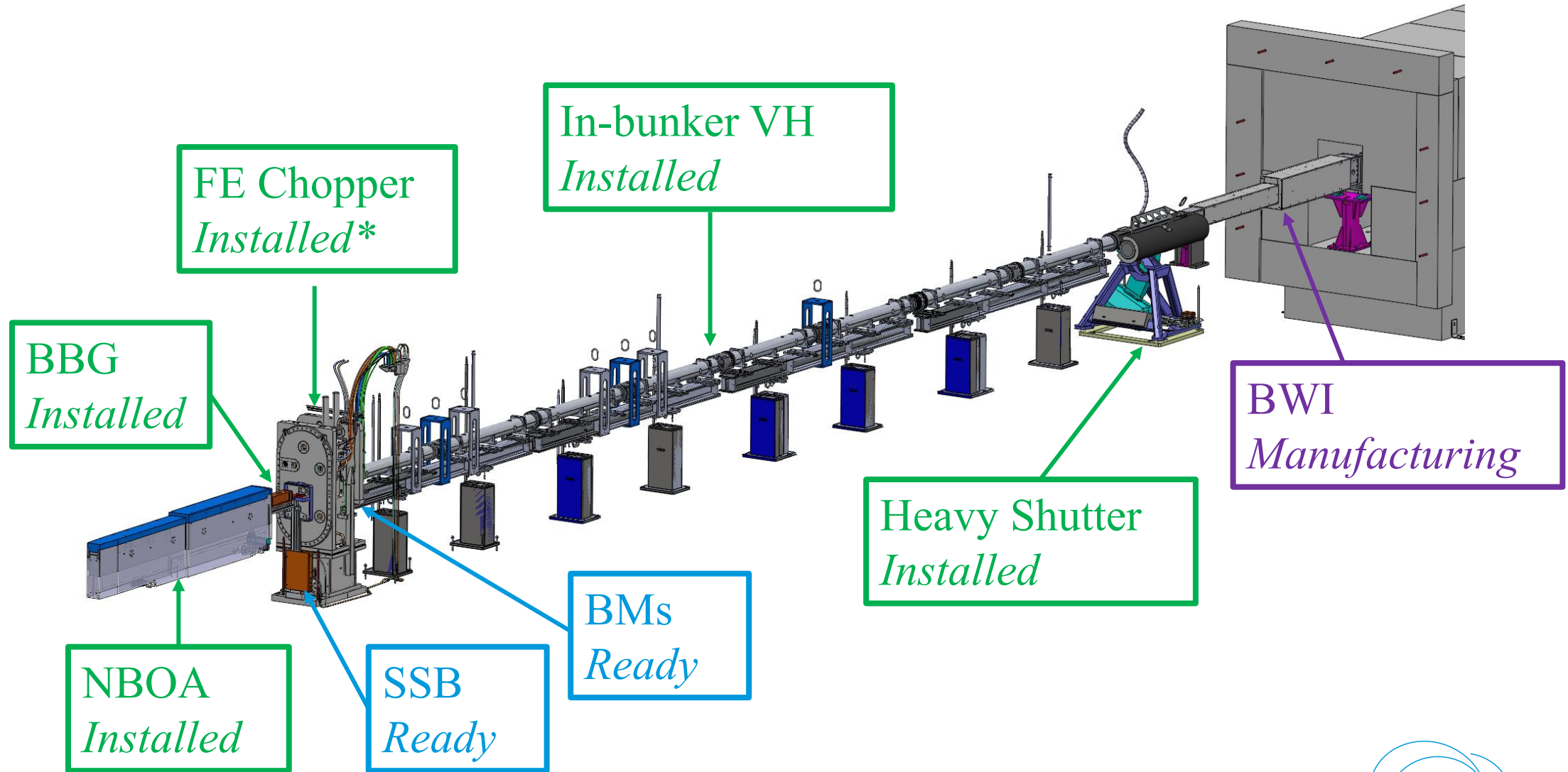
MAGiC instrument update

April 2026

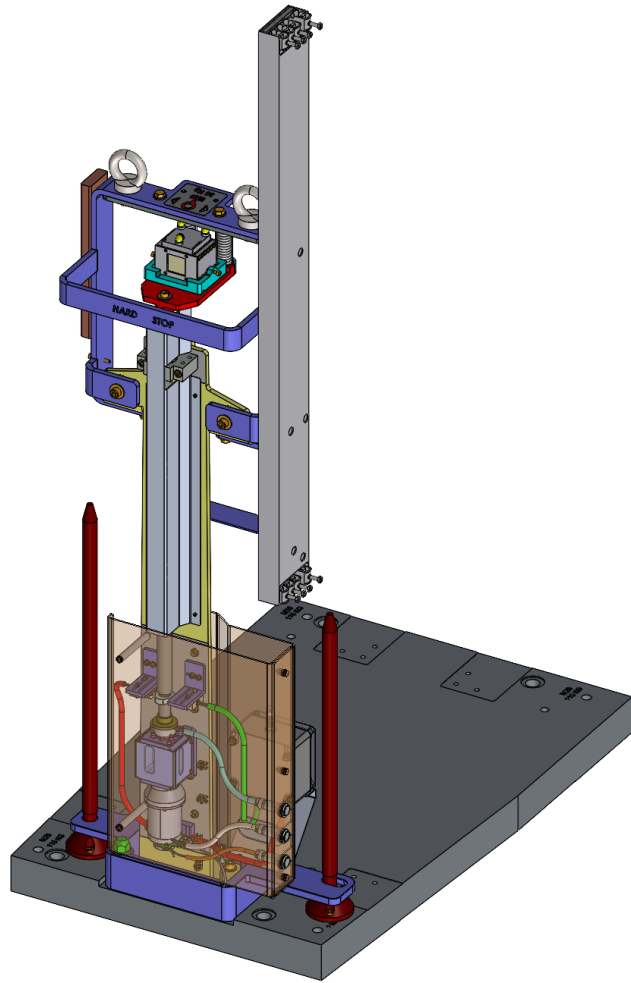
- Moritz Braun accepted the Instrument Operation Engineer position
- New design engineer starts on May 4th

Bunker

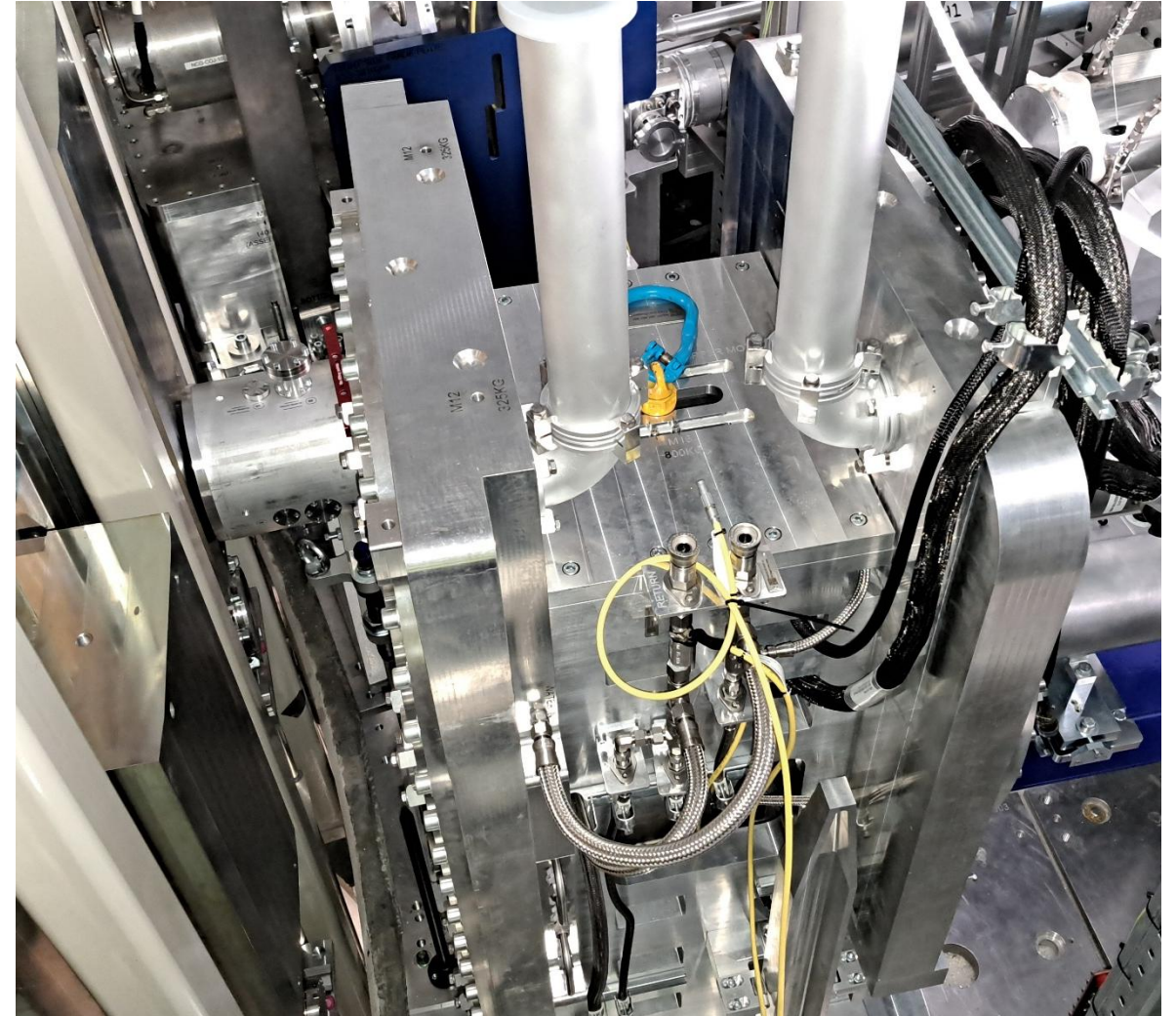
Bunker components



Solid State Bender (SSB)



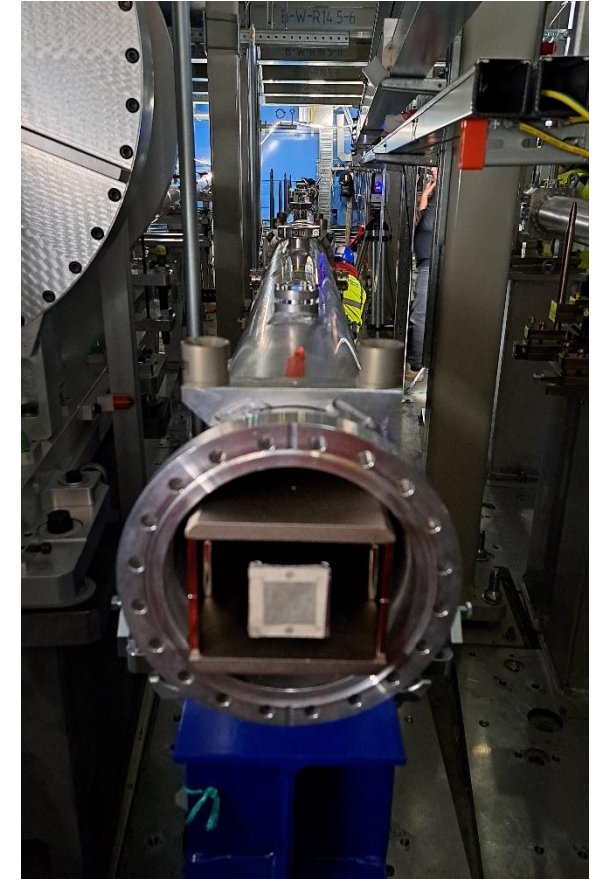
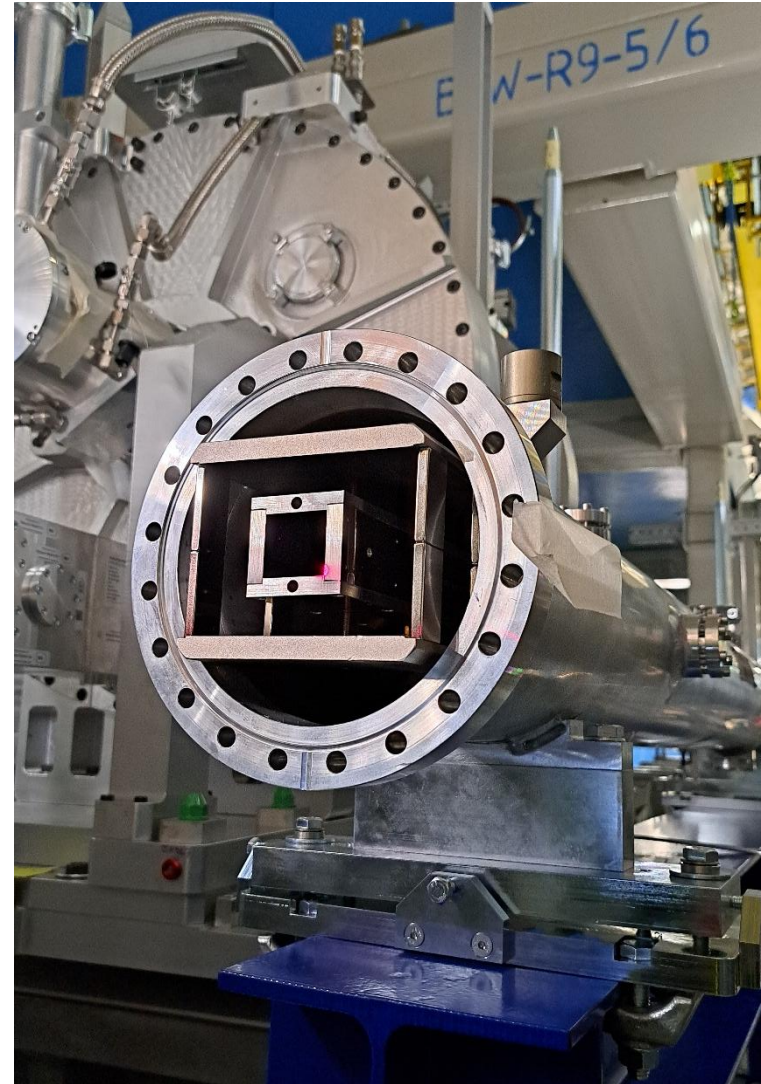
FE Chopper



In-bunker Vacuum Housing



In-bunker Vacuum Housing



Bunker Wall Insert



The installation in June

Out-of-Bunker Neutron Optics and Conditioning Systems

D03/E02 components

160m-long neutron guide
Ready

OoB VH, Sect. 4
Designed

Adiabatic Spin-Flipper
Being designed

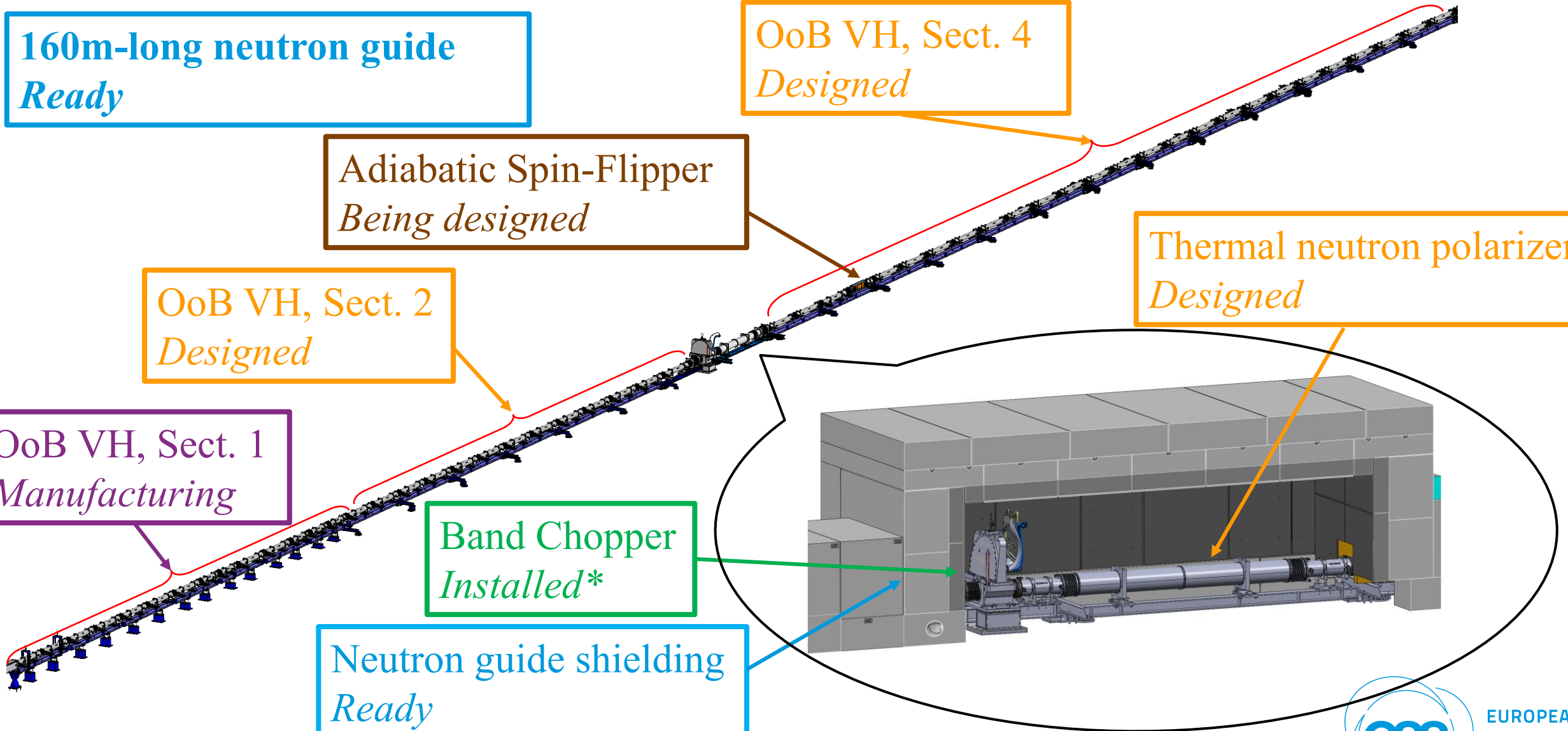
OoB VH, Sect. 2
Designed

Thermal neutron polarizer
Designed

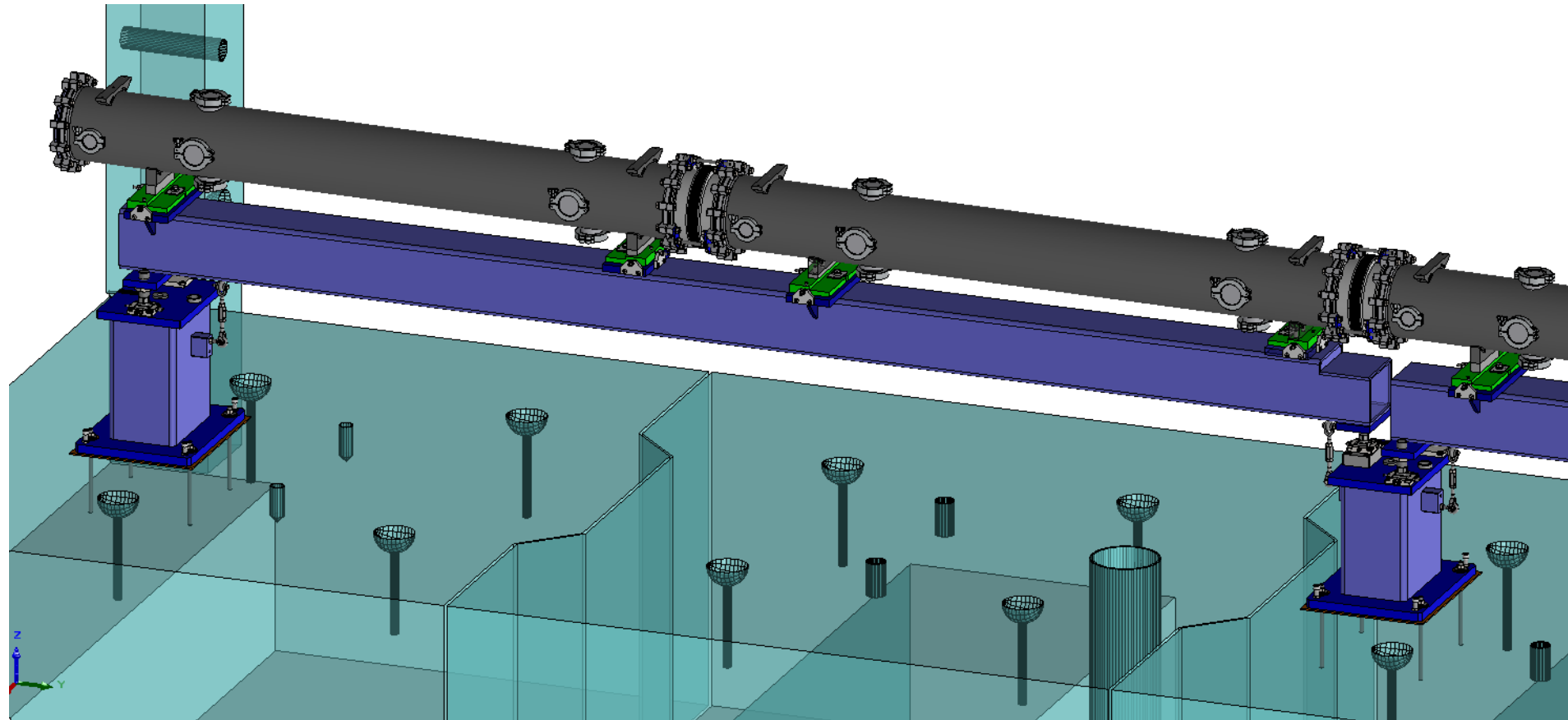
OoB VH, Sect. 1
Manufacturing

Band Chopper
*Installed**

Neutron guide shielding
Ready



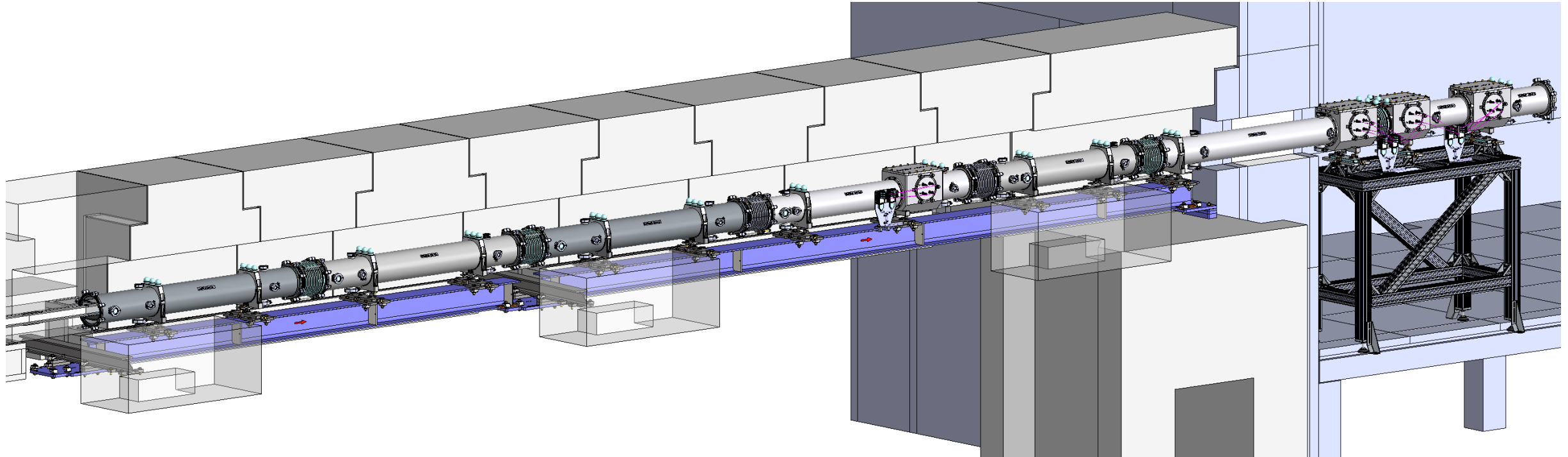
Out-of-Bunker Vacuum Housing



MIRRO•TRON

ICEB meeting *Vasiukov Denis* | *28th April 2026* | *Slide 12*

Out-of-Bunker Vacuum Housing, section 5

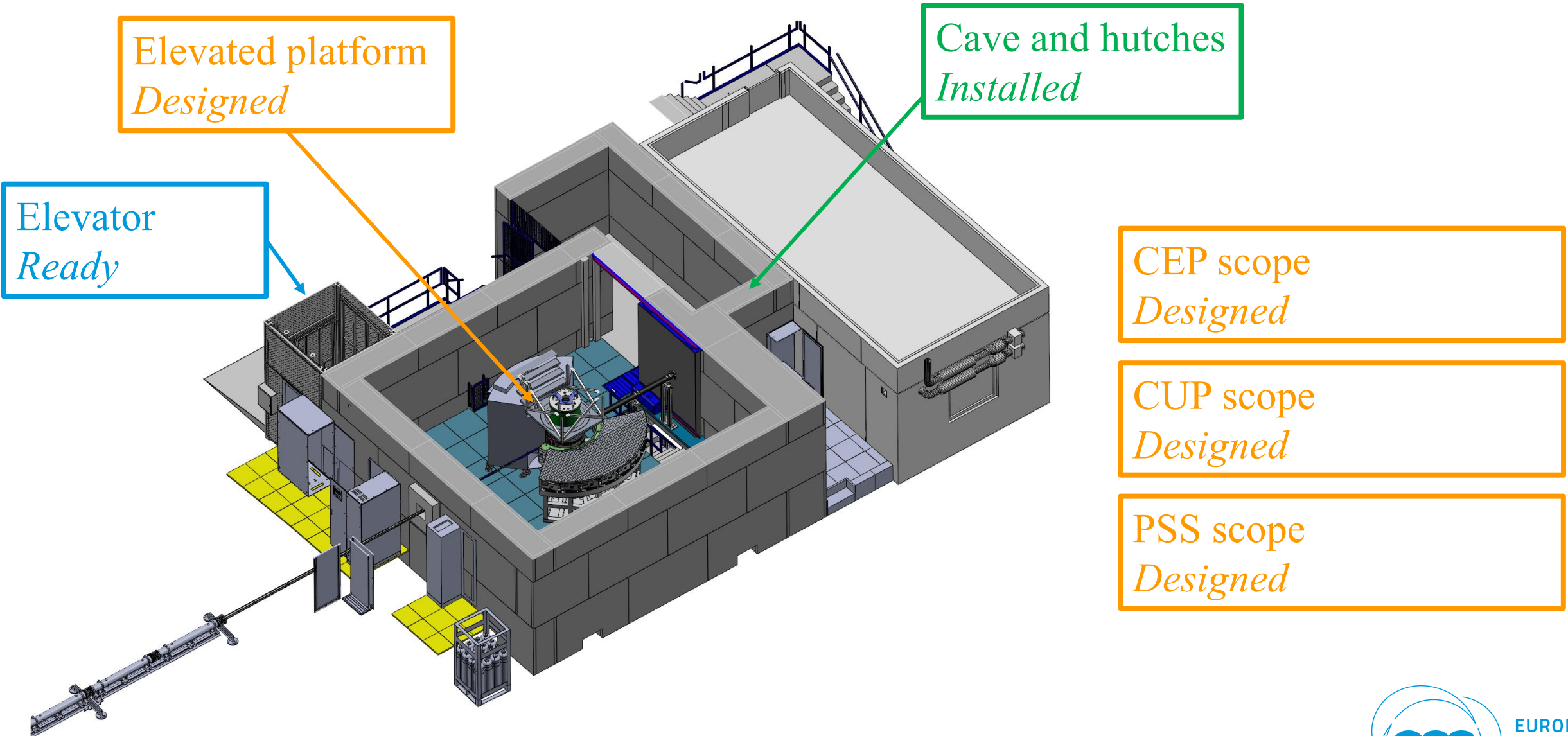


Band Chopper

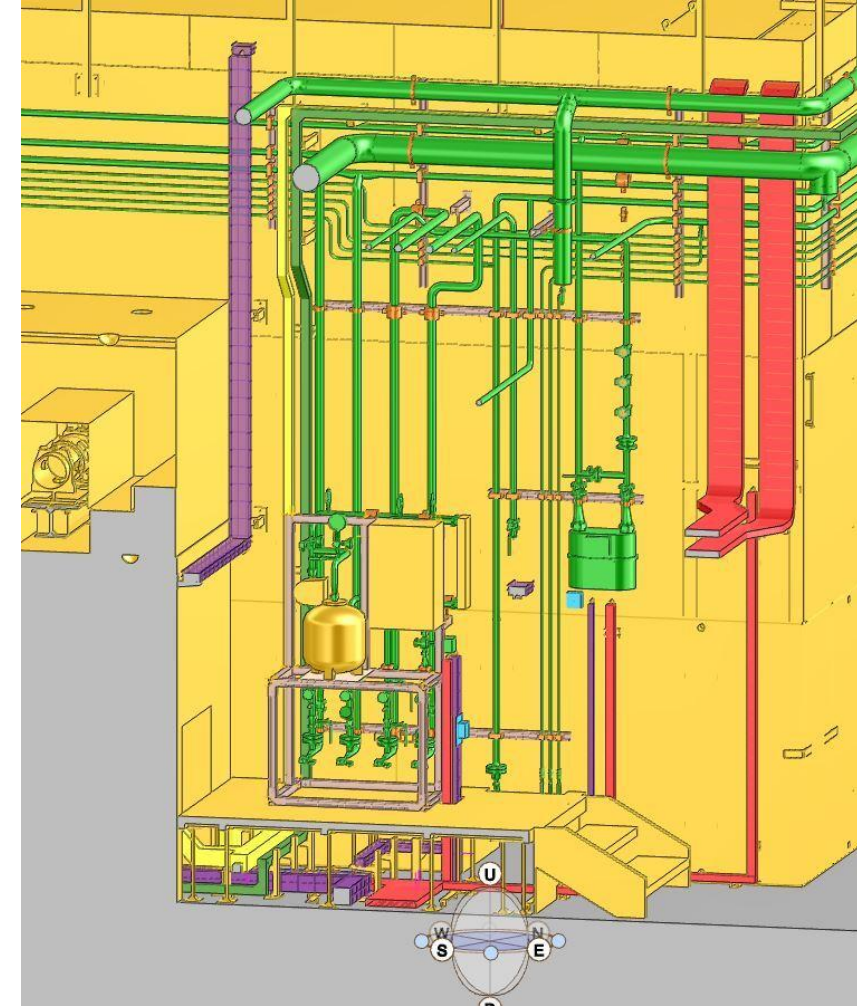
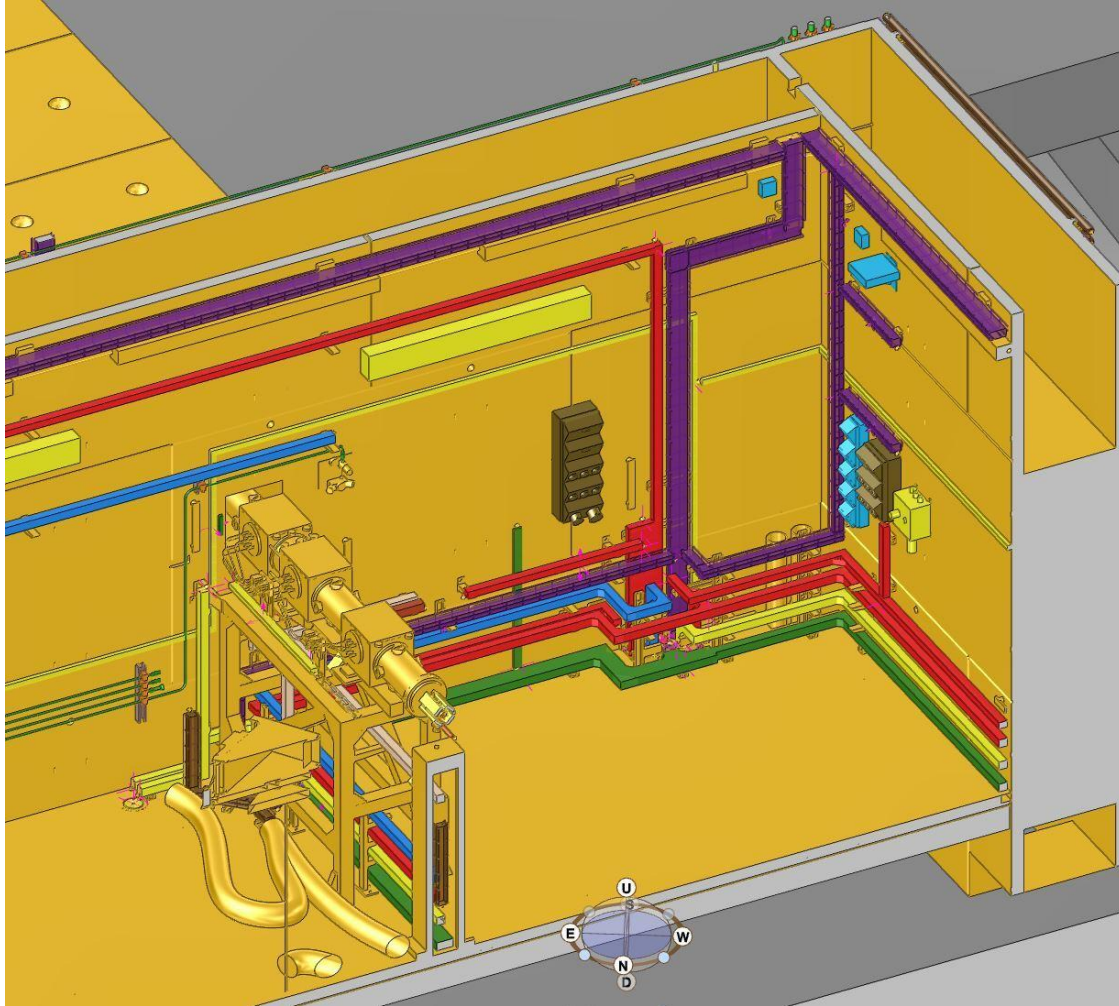


Infrastructure

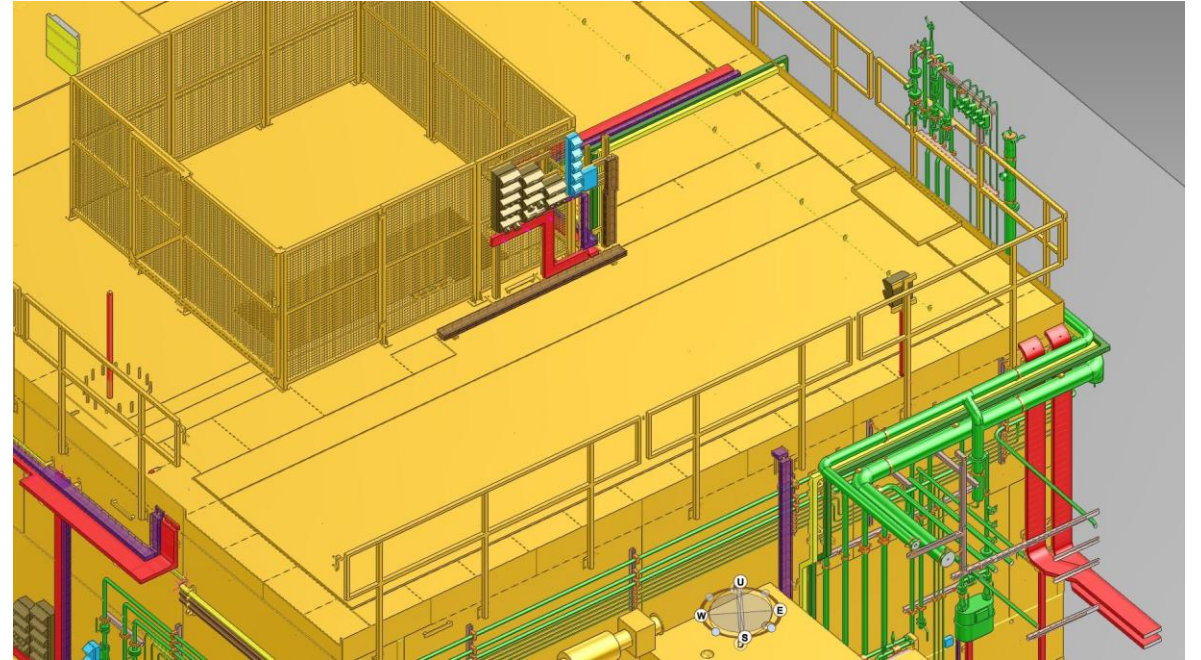
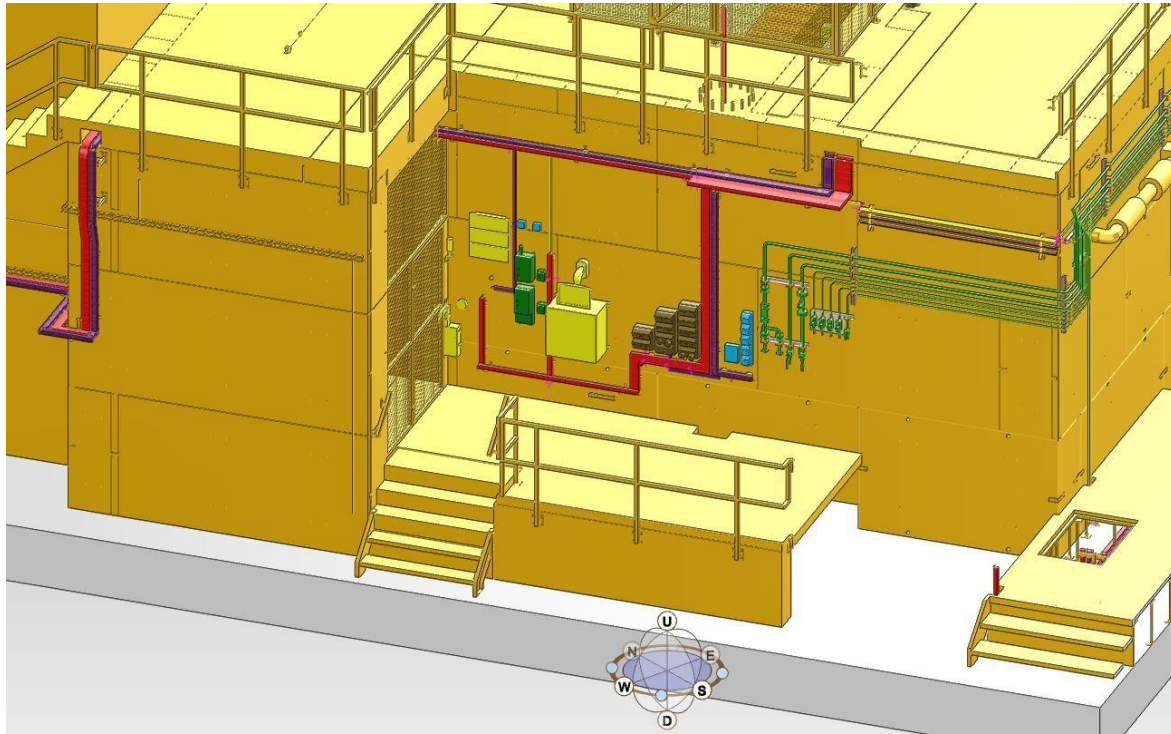
Experimental Cave



CEP and CUP design



CEP and CUP design

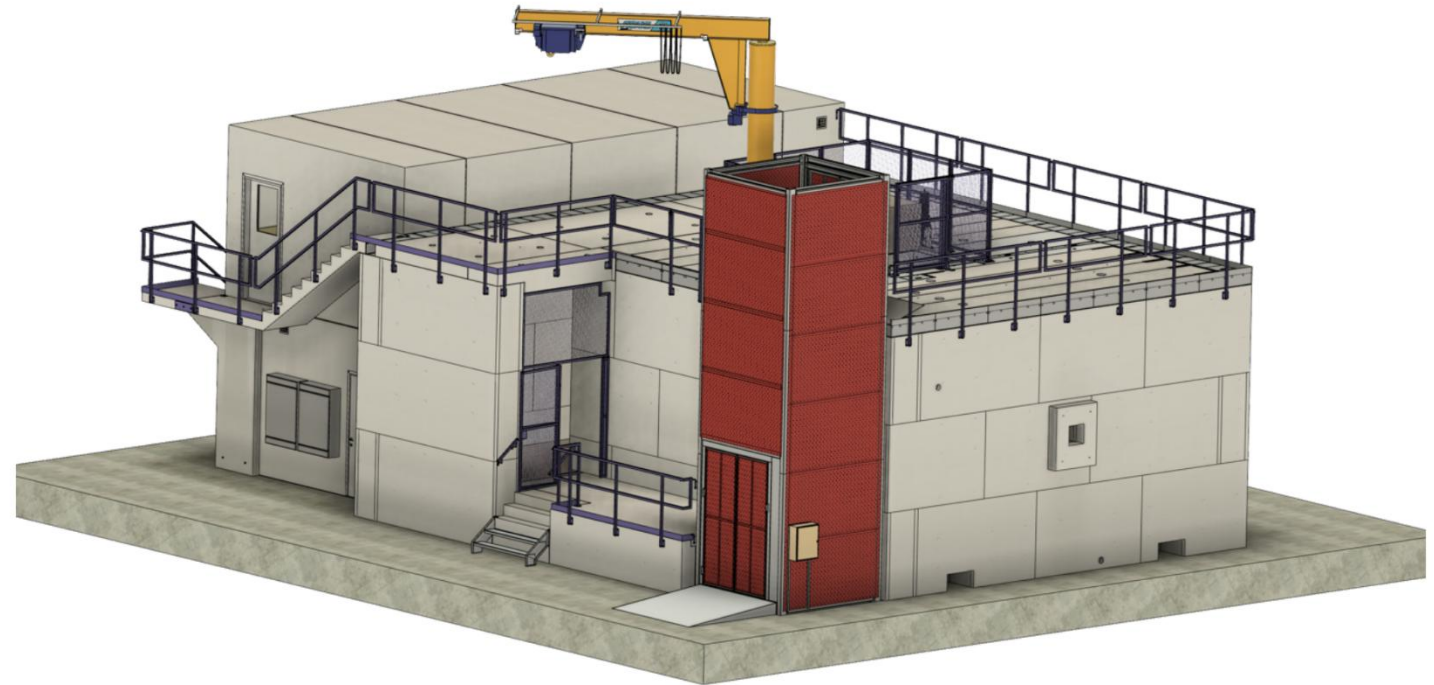


Goods elevator



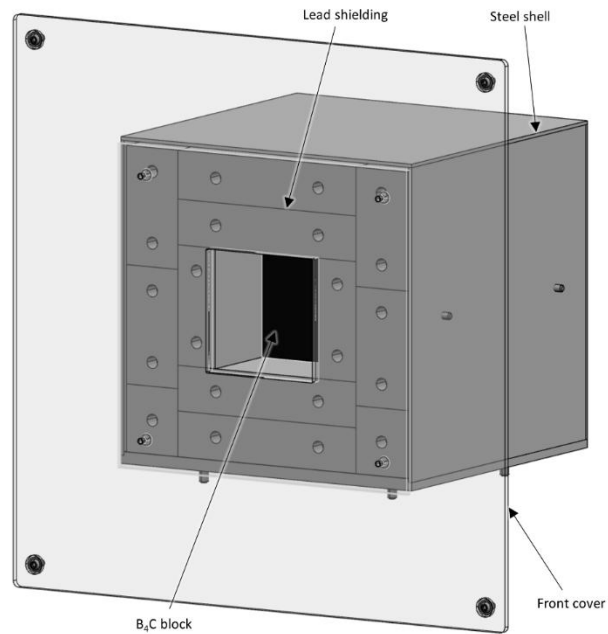
ICEB meeting

Vasiukov Denis | 28th April 2026 | Slide 19



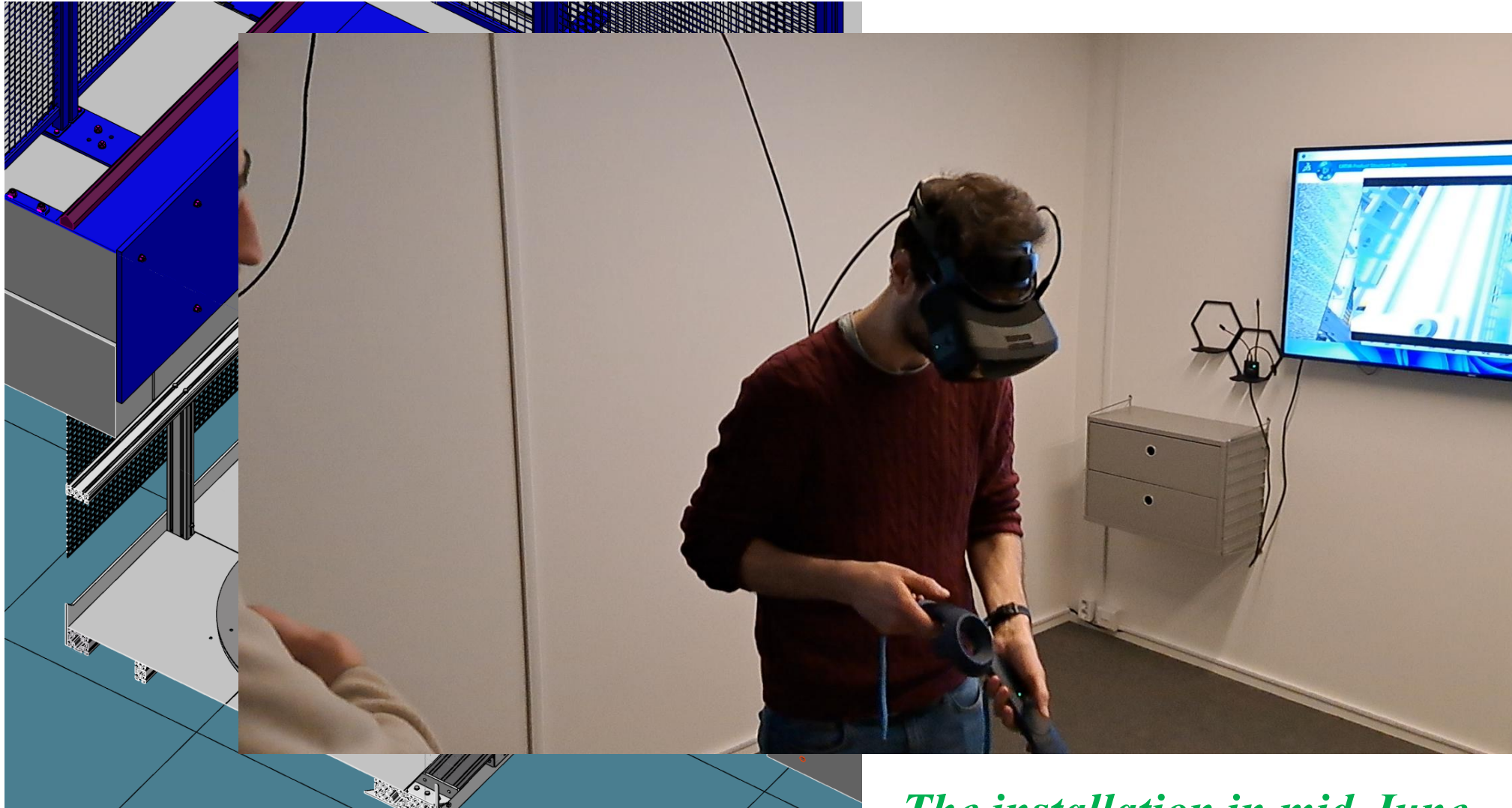
The installation in May

Beamstop



The installation next week

Elevated platform



The installation in mid-June

ICEB meeting

Vasiukov Denis | 28th April 2026 | Slide 21

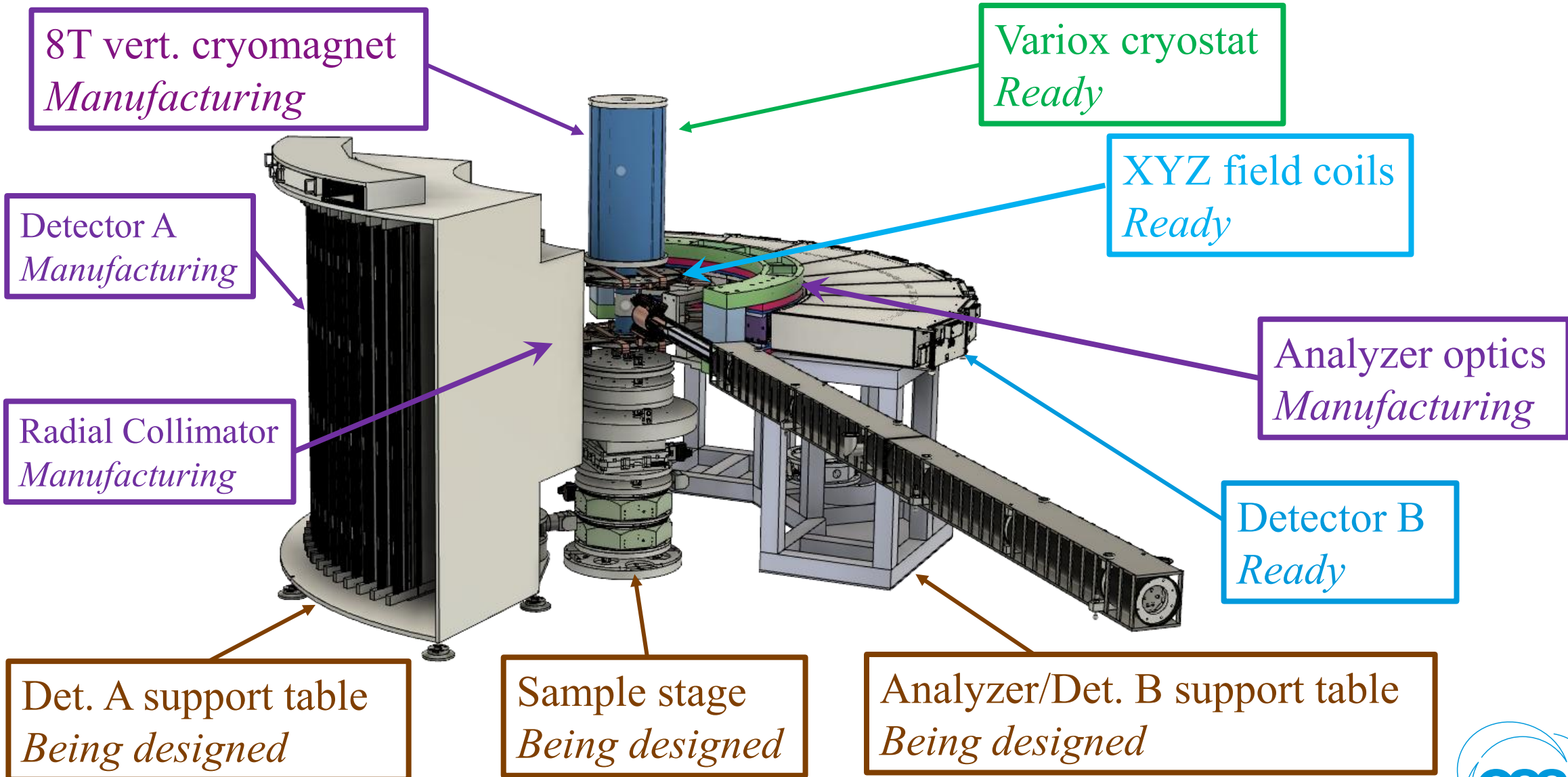
Infrastructure installations

- *Elevator in May*
- *Platform in June*
- *CEP installations begin in June*
- *ICS, CUP etc. will follow*

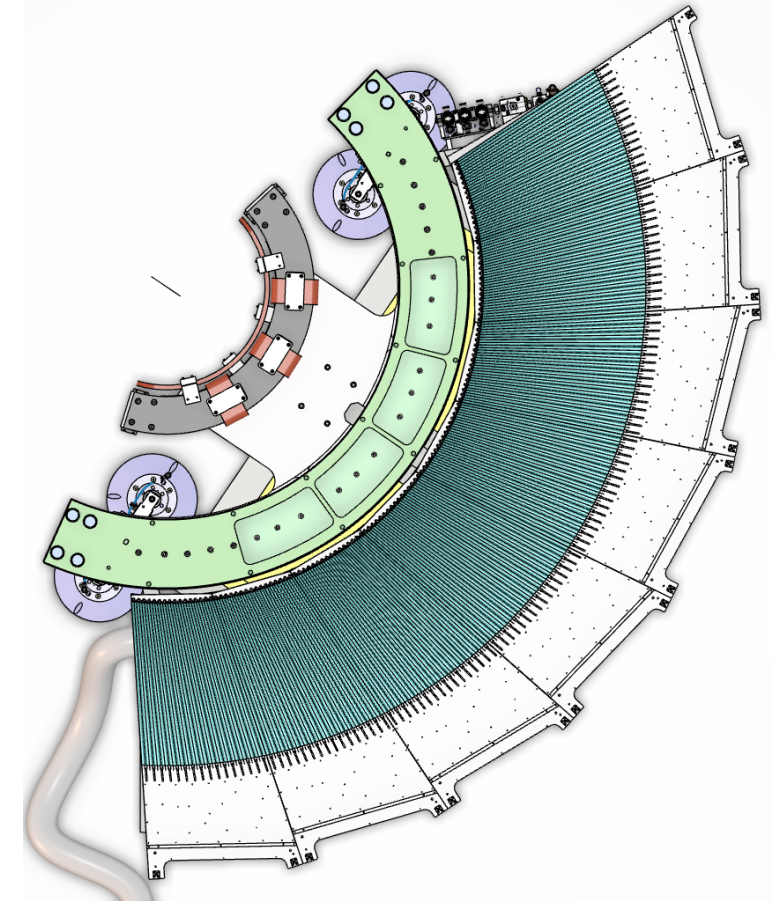
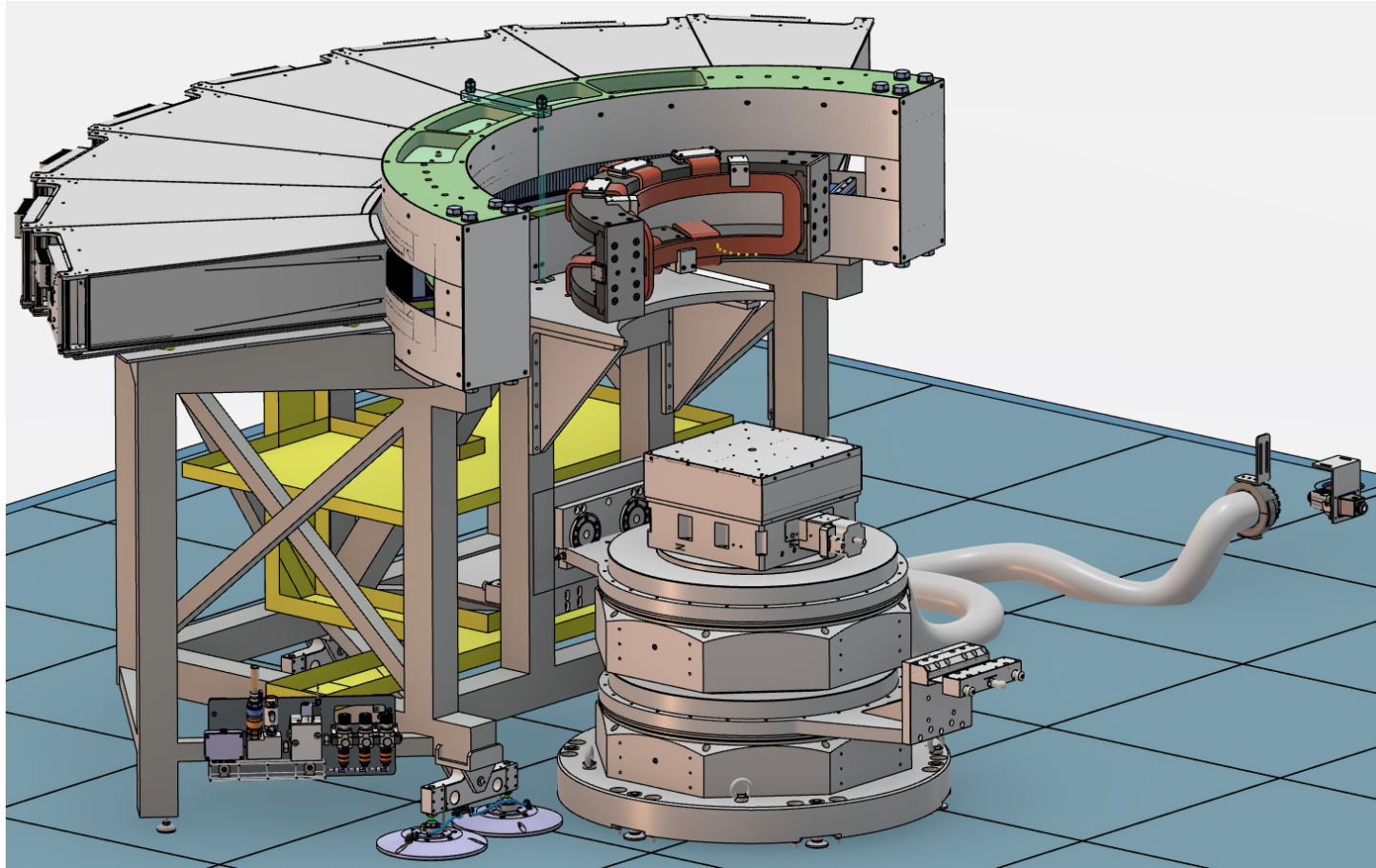


Scattering characterization system

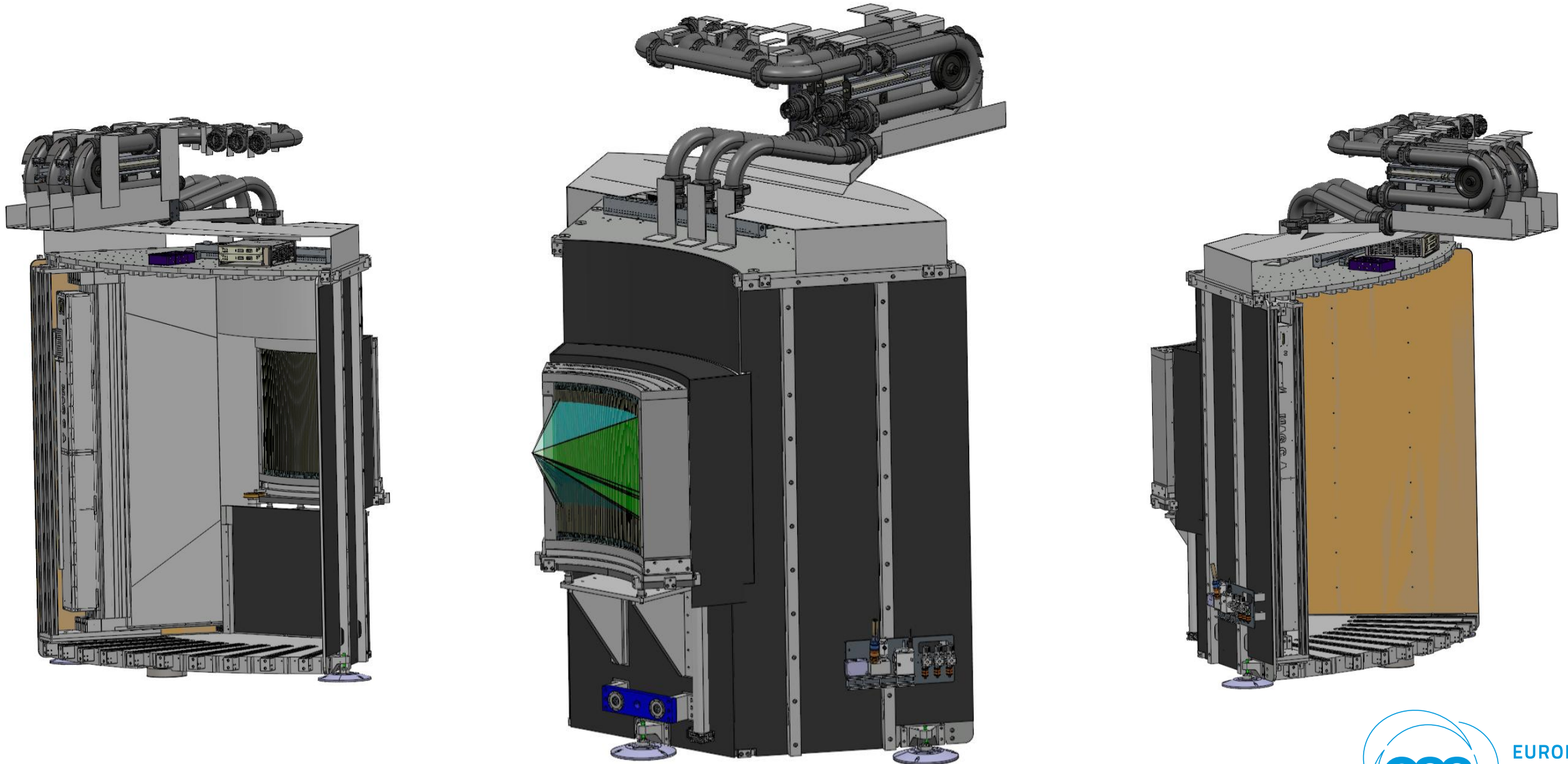
Scattering characterization system



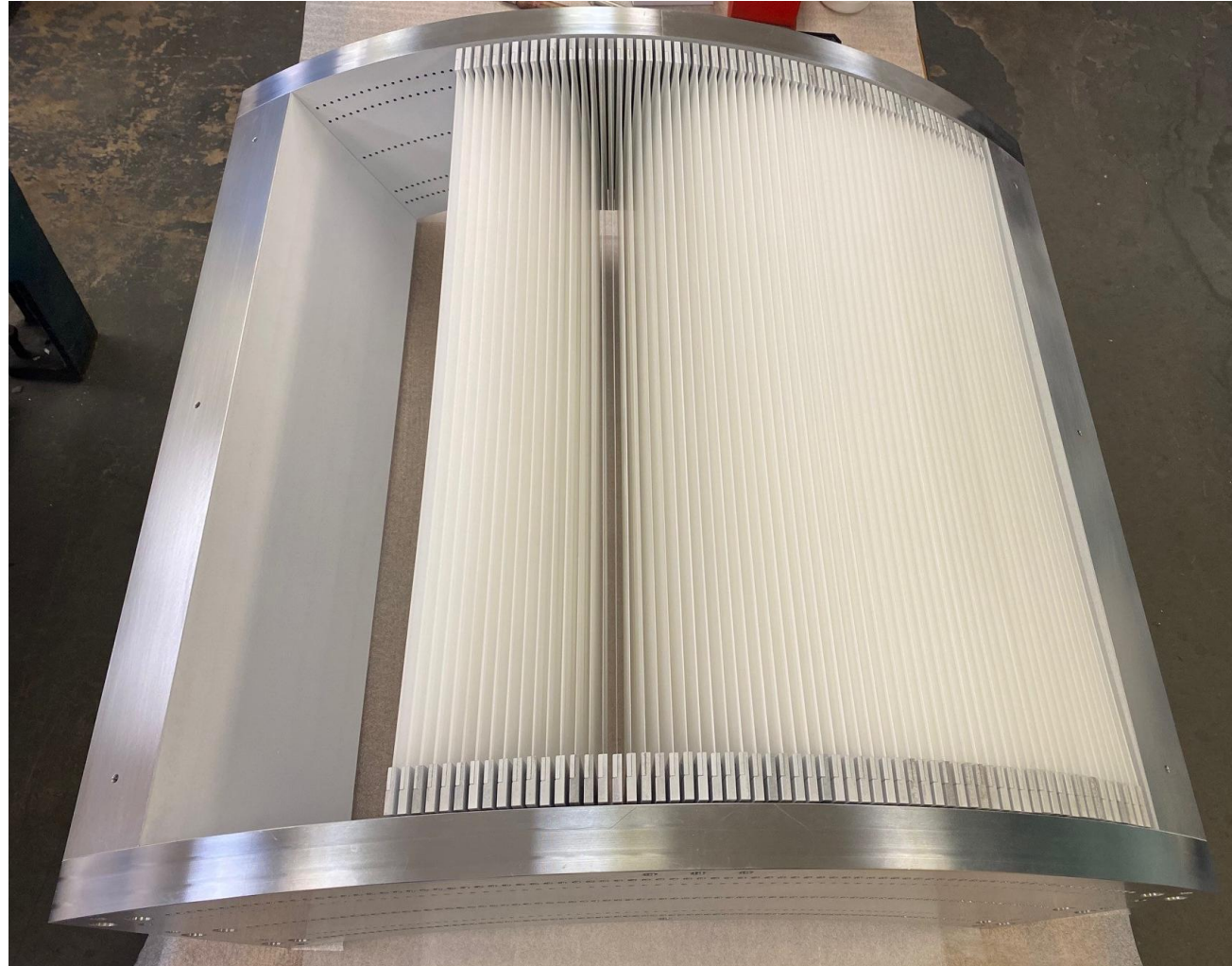
Analyzer + Detector B support structure



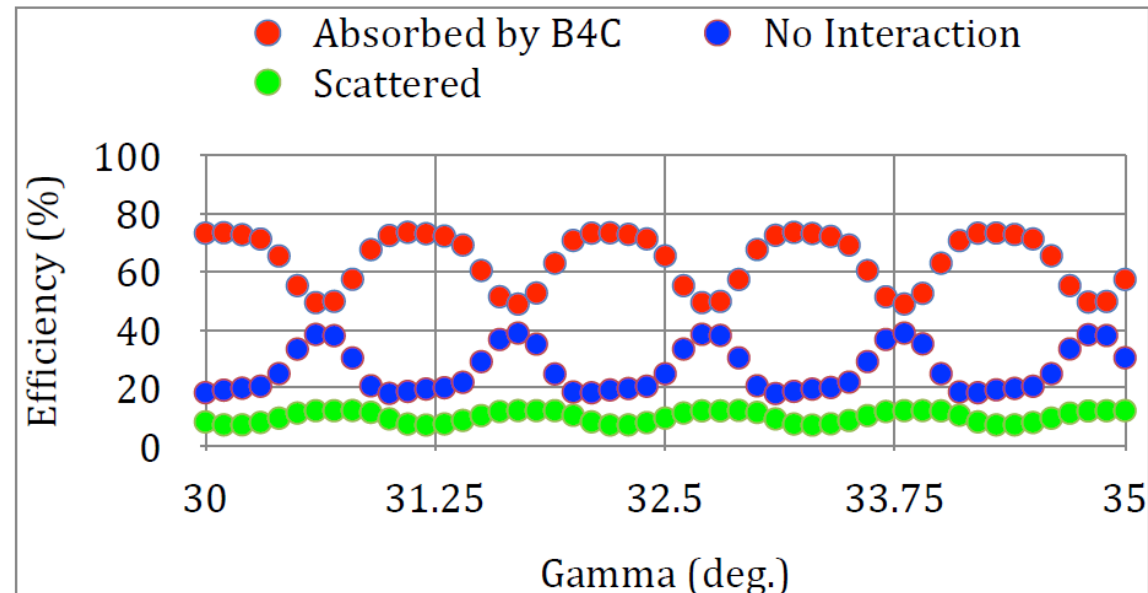
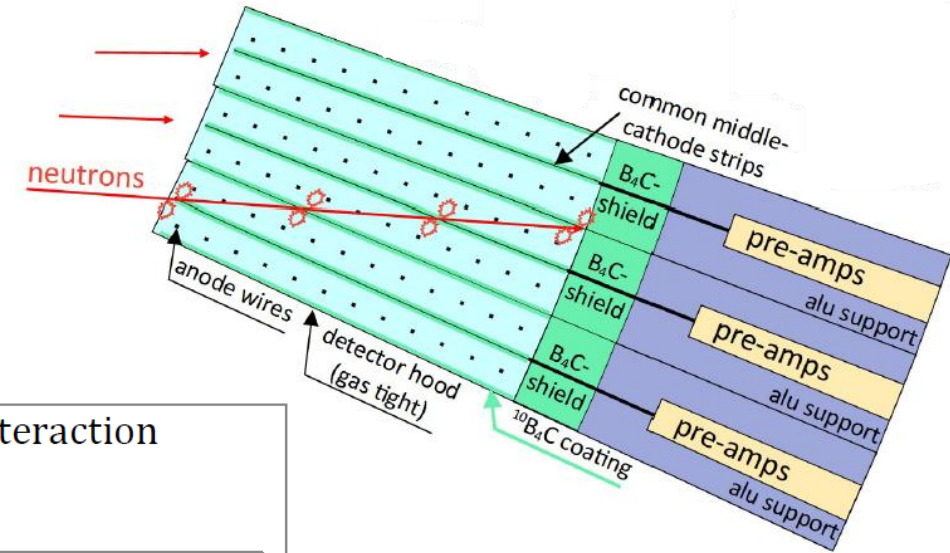
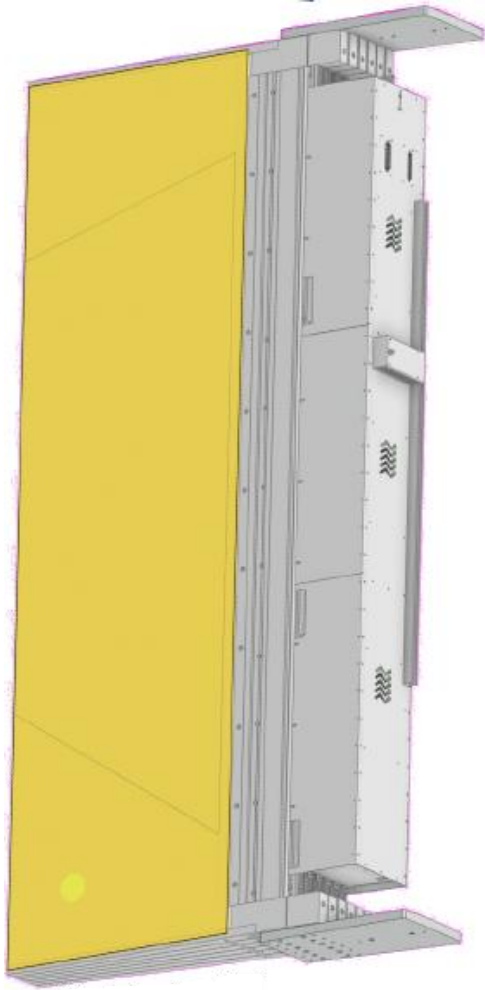
Detector A support structure



Radial Collimator



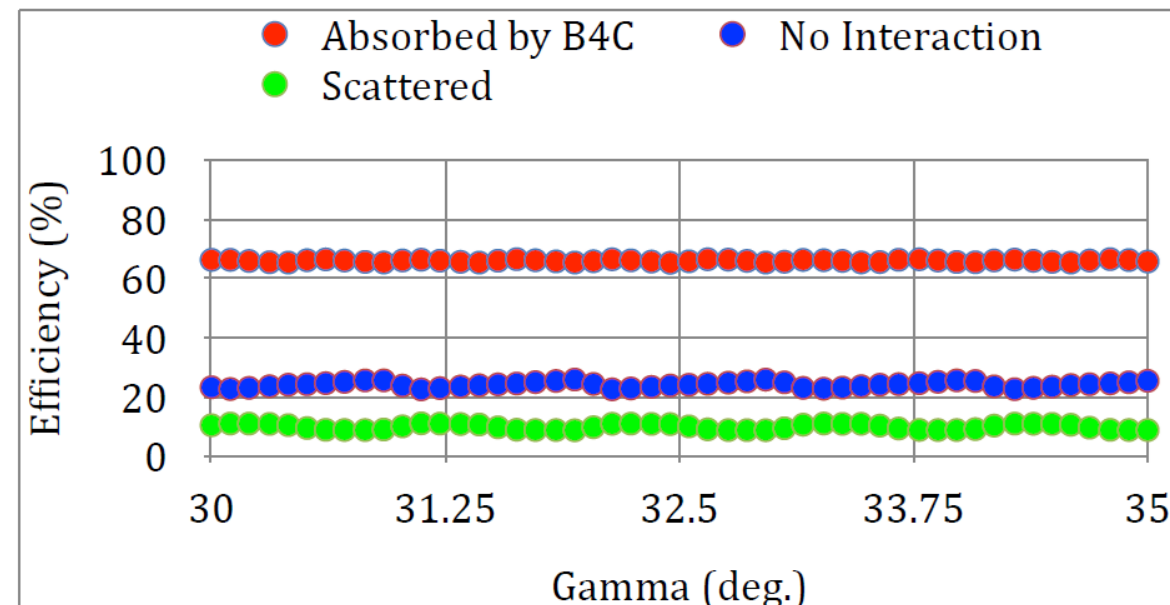
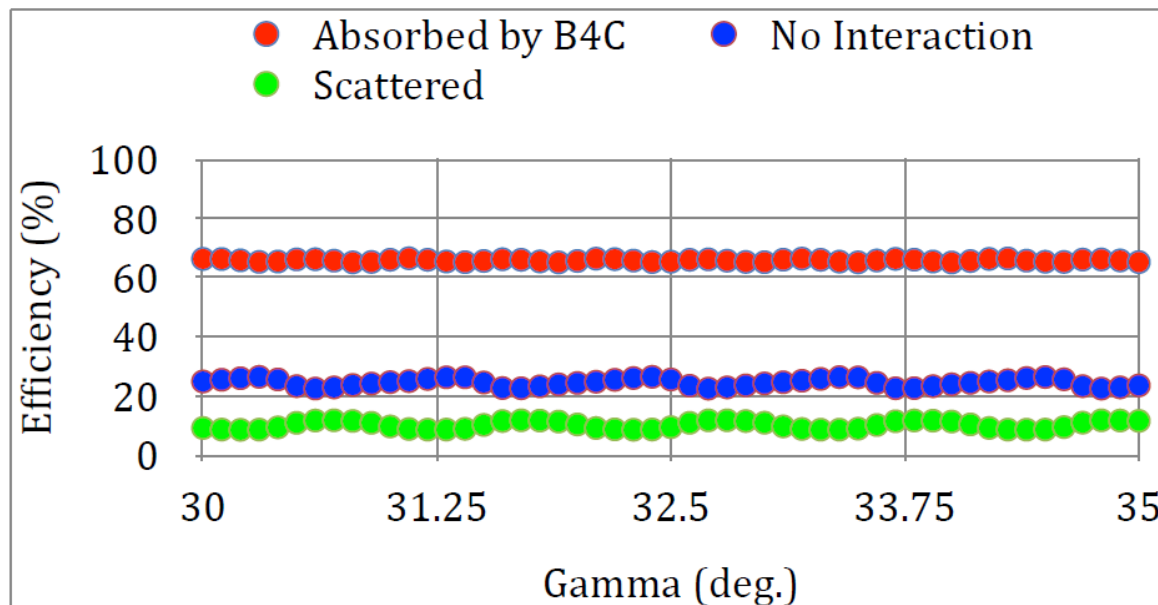
Detector A geometry issue



Estimated efficiency of Detector A at inclination 5 degrees and wavelength 1 angstrom as a function of Gamma.

Detector A geometry issue

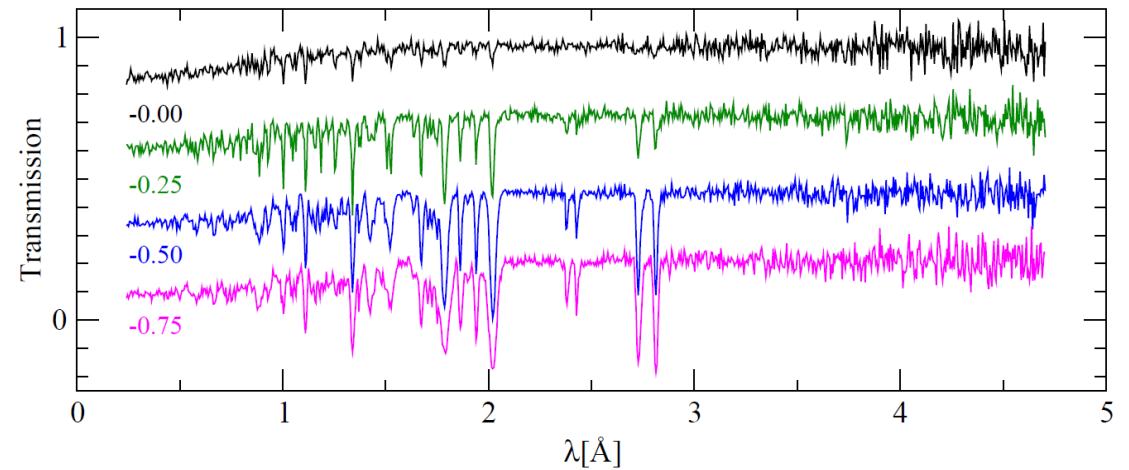
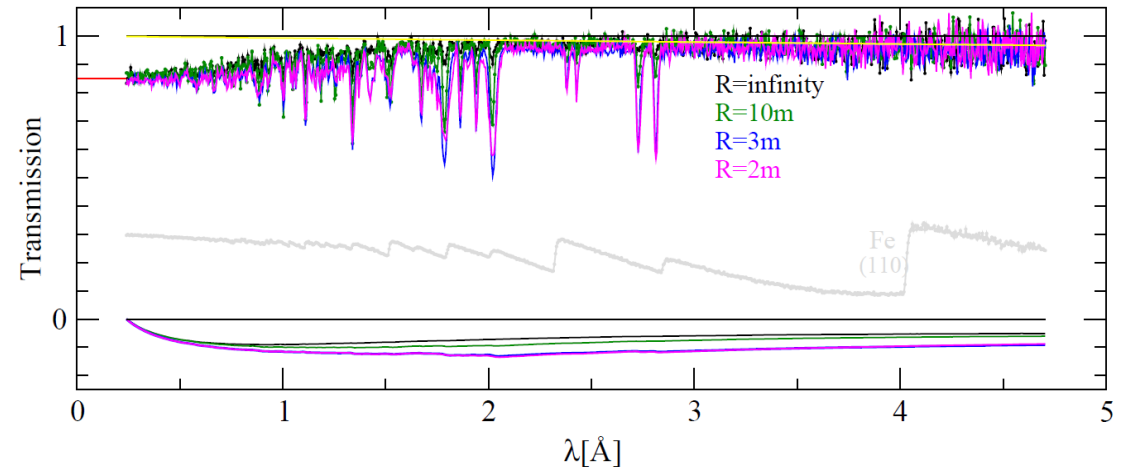
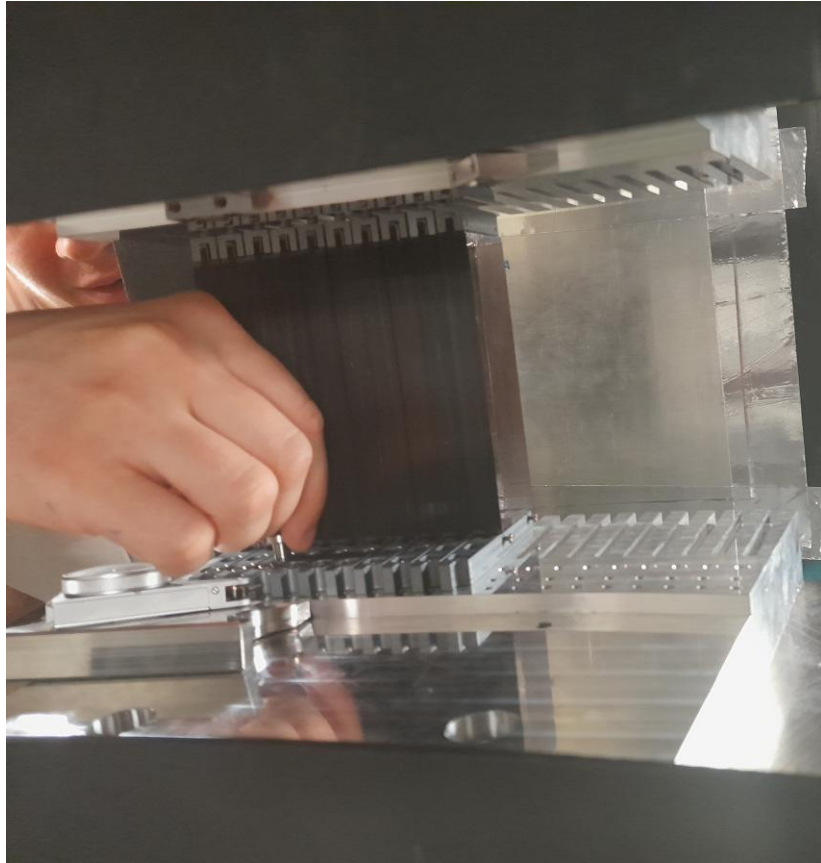
Number of layers n	Optimal angle Ω (degrees)	$\Delta\gamma$ of voxel (degrees)
1	3.031	0.050
2	6.065	0.100
3	9.101	0.150
4	12.143	0.200



Estimated efficiency of Detector A at inclination 6.065 degrees and wavelength 1 angstrom as function of Gamma

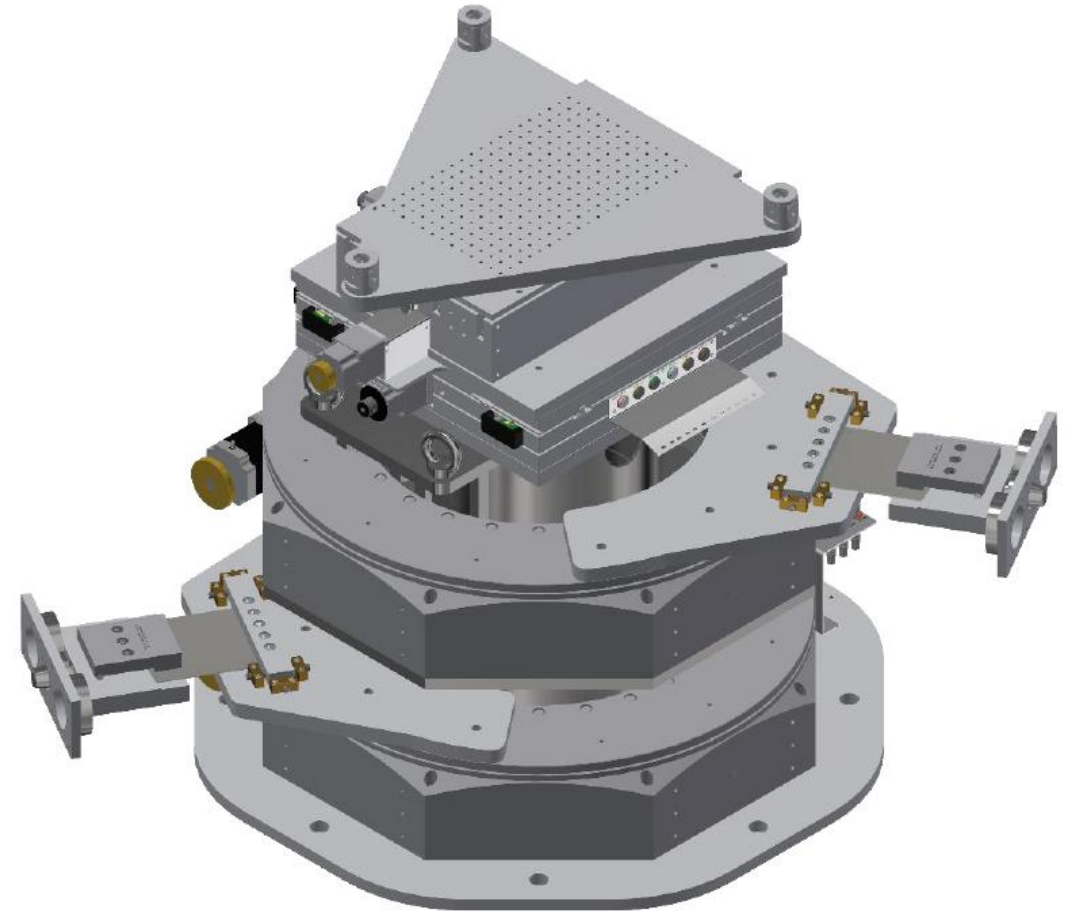
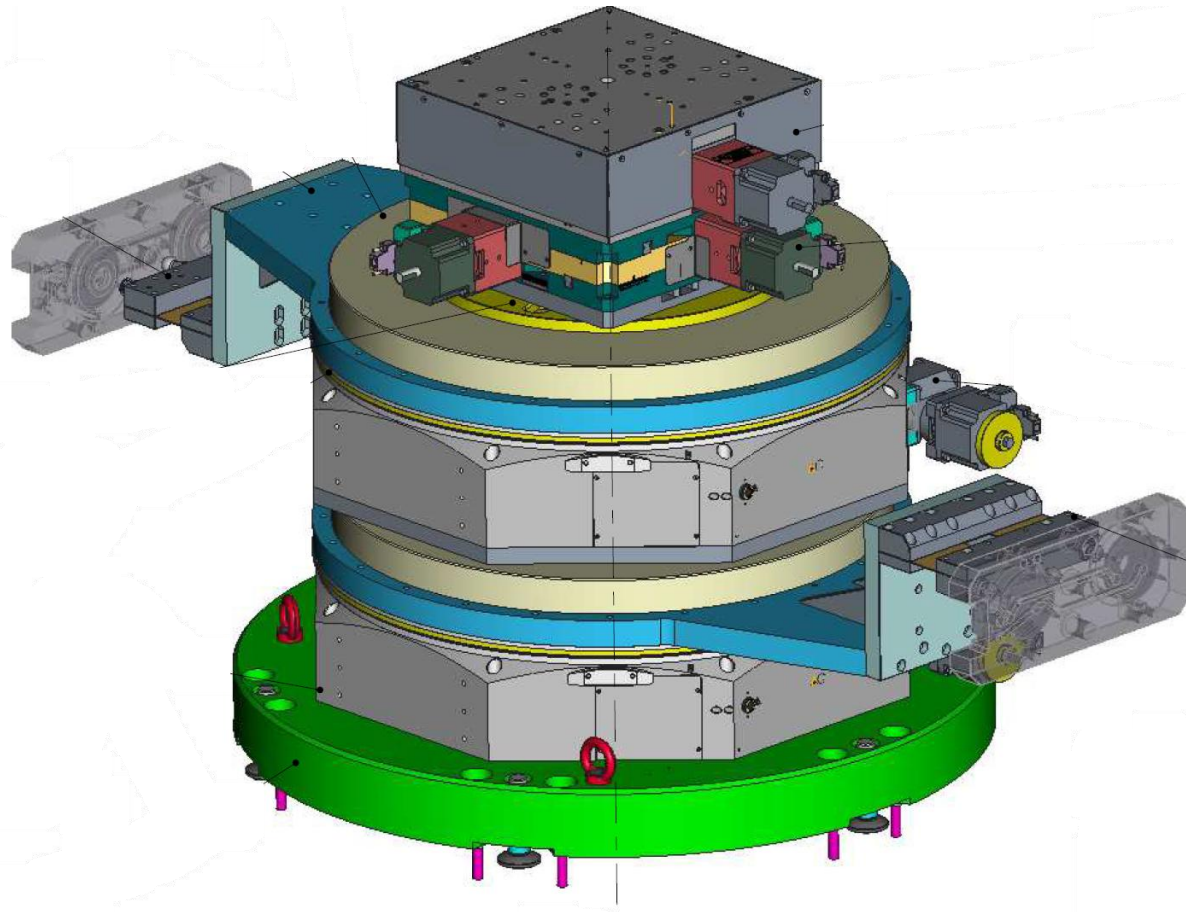
Estimated efficiency of Detector A at inclination 9.101 degrees and wavelength 1 angstrom as function of Gamma

Test of the analyzer optics at ISIS



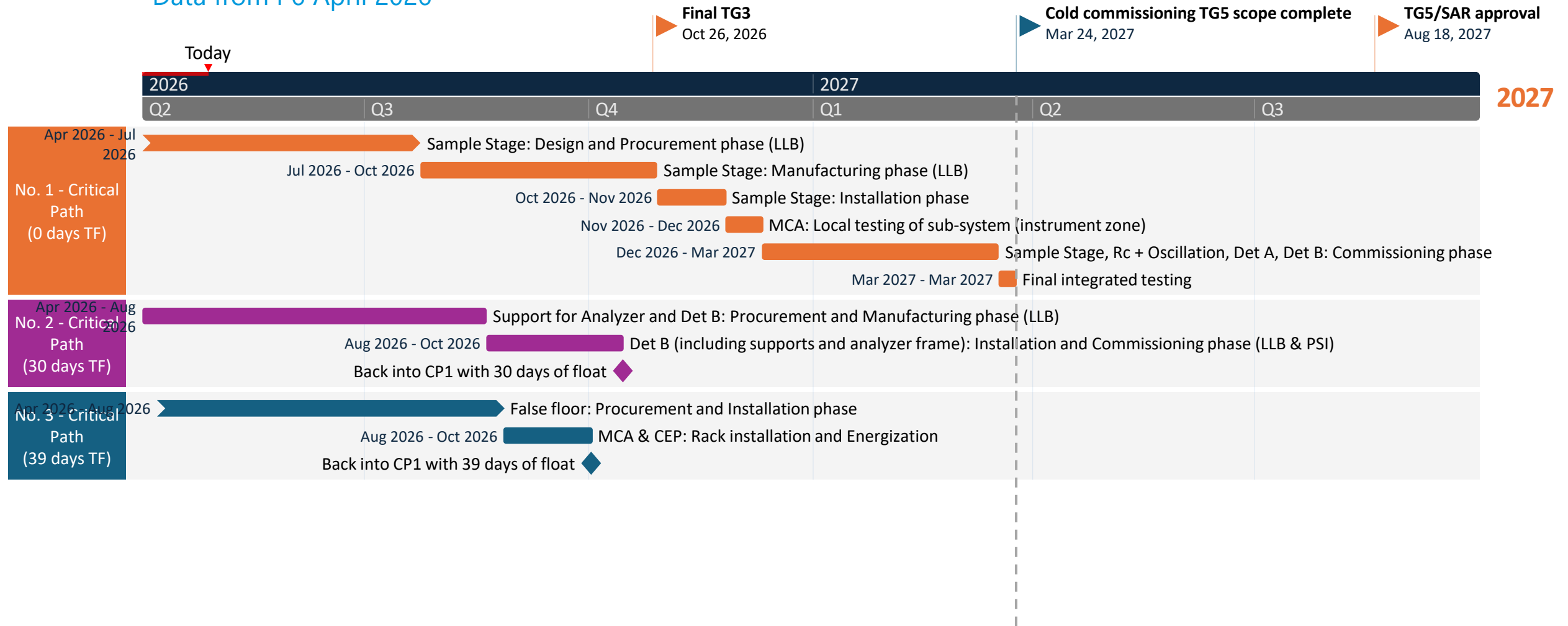
ToF experiment at IMAT instrument, 7 – 10 May

Sample stage



Magic Critical Paths

Data from P6 April 2026



Design phase ends at CDR approval

Procurement and Manufacturing phase ends at FAT closure of open points

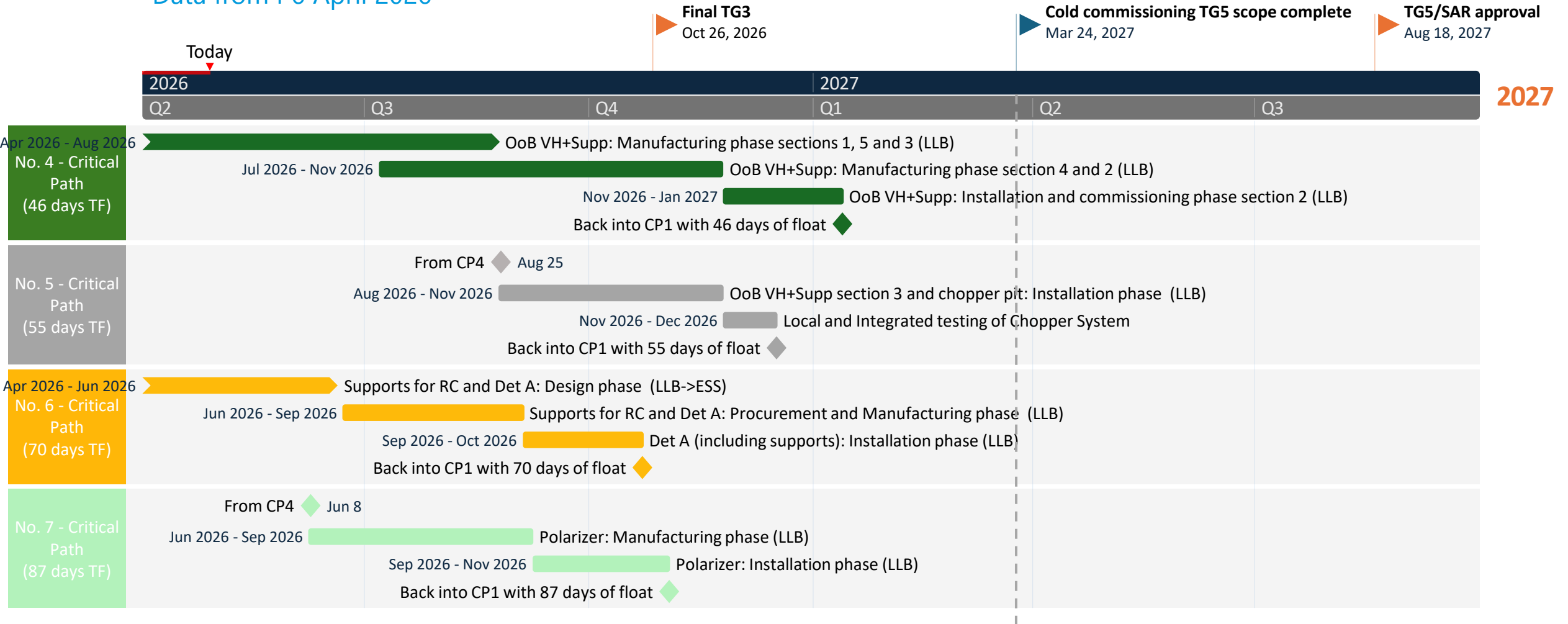
Installation and Commissioning phase ends at SAT approval

TF: number days of **total float** to Instrument's TG5

Note: Analyzer optics is part of the instrument scope but currently not linked to TG5 in P6

Magic Critical Paths

Data from P6 April 2026



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

Note: Analyzer optics is part of the instrument scope but currently not linked to TG5 in P6