



The great opening of 2024

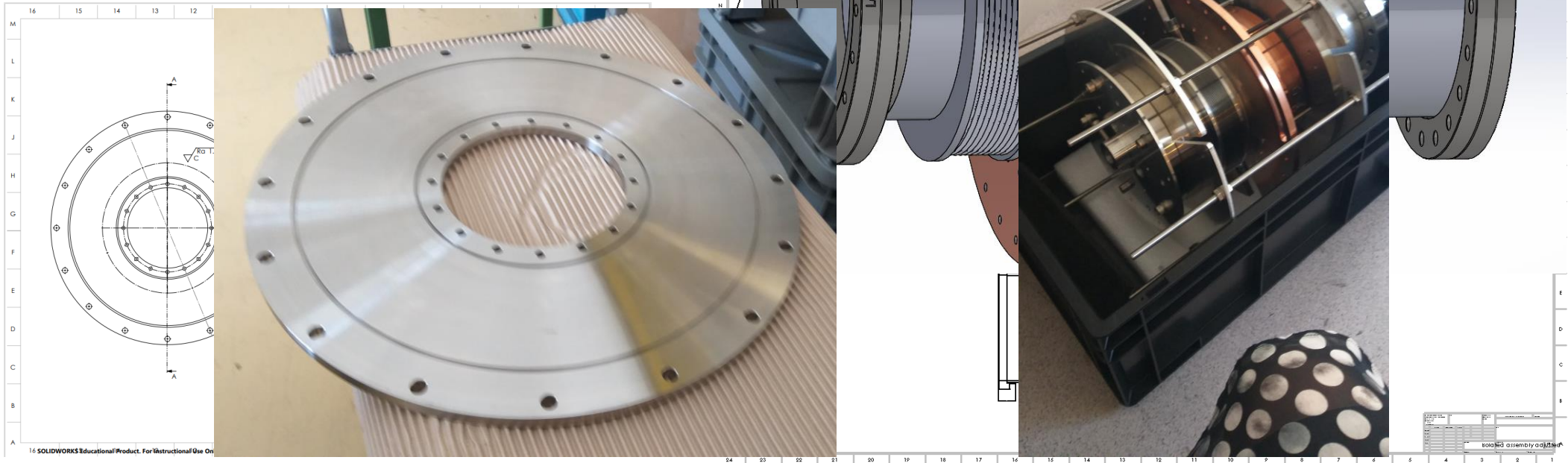
Duration: mid-August to end of October

Content

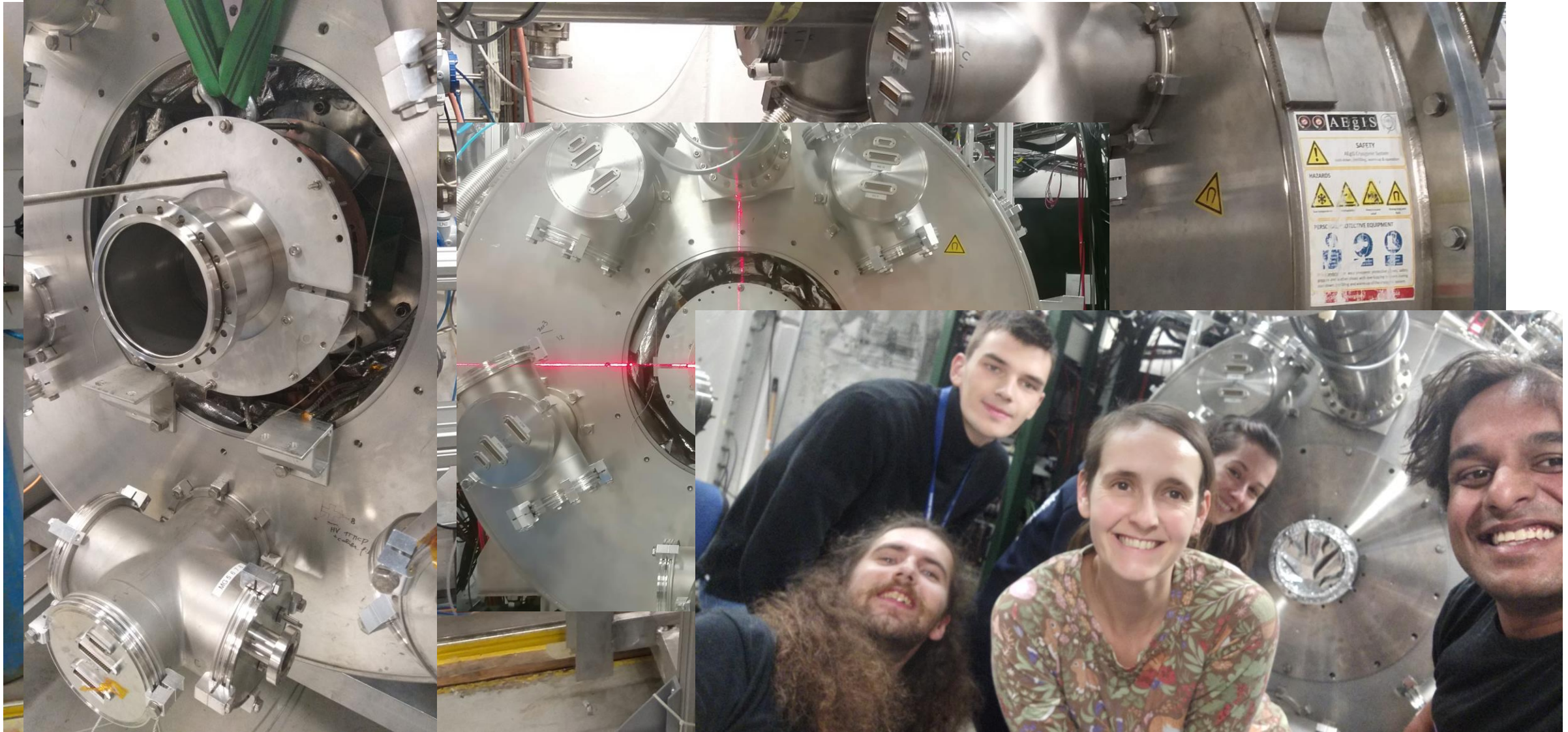
- 1T bellows installation
- Hedgehog detector system installation
- New 1T MCP installation

1T bellows assembly installation

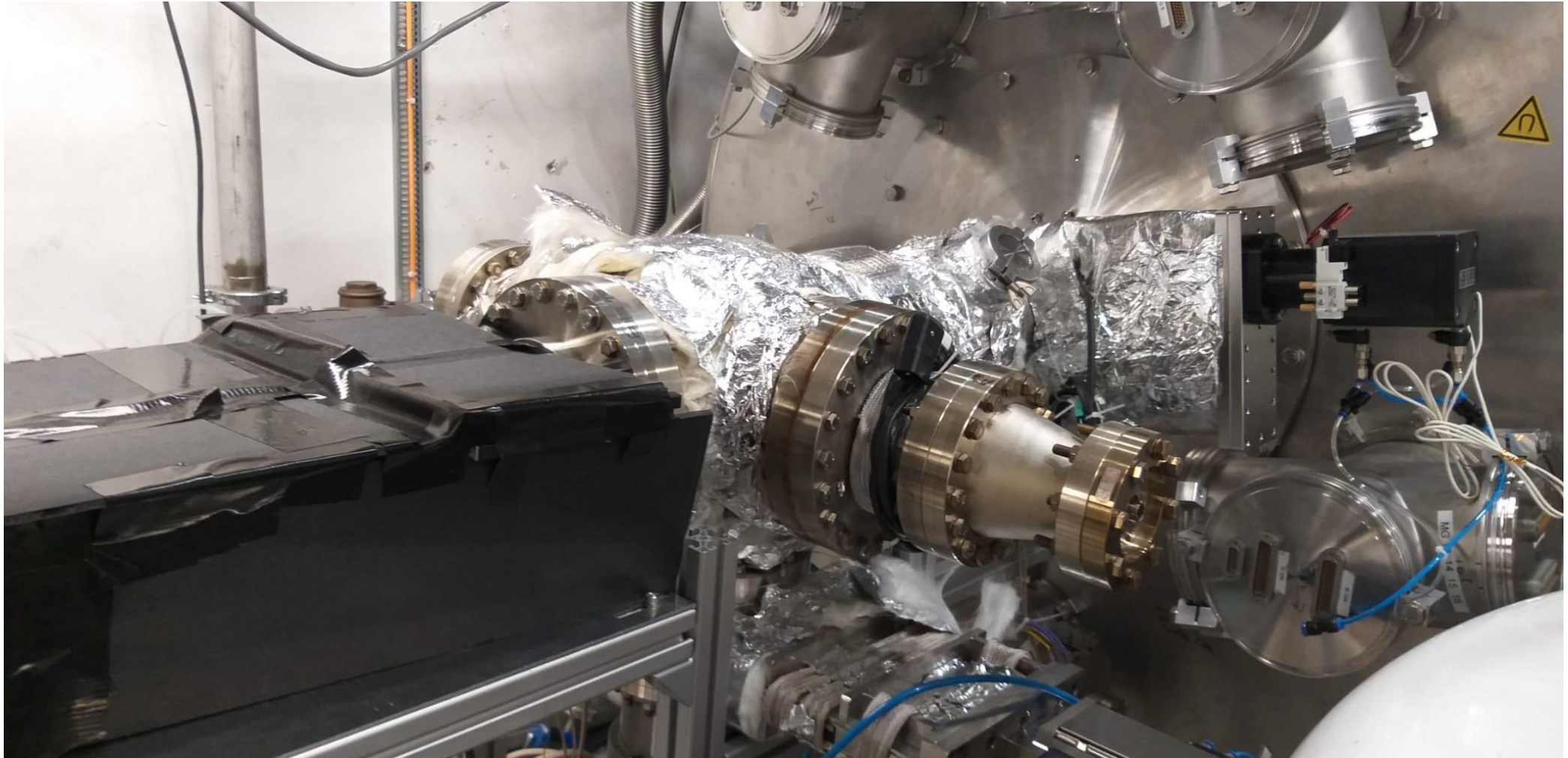
- Bellows to facilitate Hbar extraction beamline
- Cost: ~20K
- 2 major pieces: bellows assembly and a new OVC closing flange
- Production finalized in August



1T bellows assembly installation



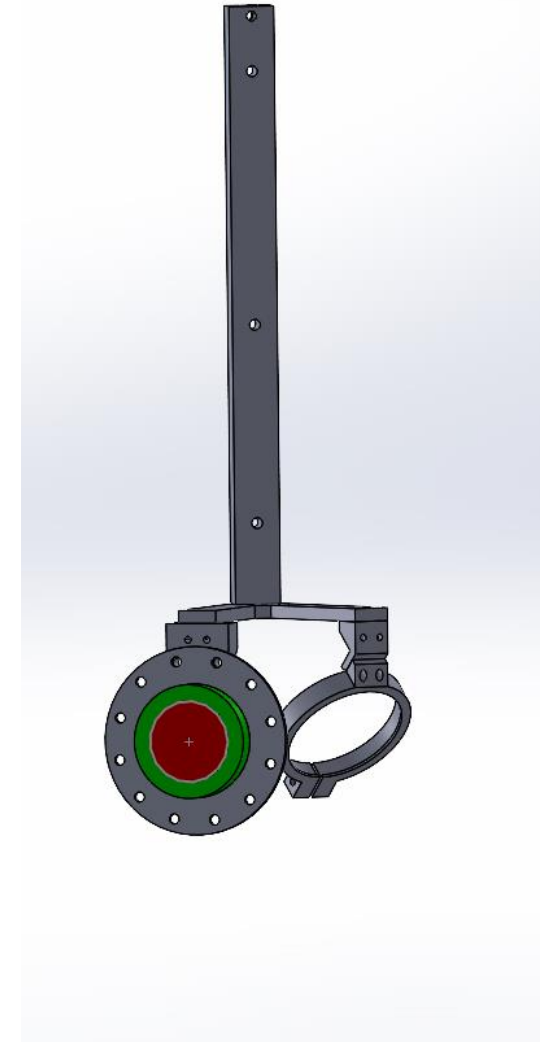
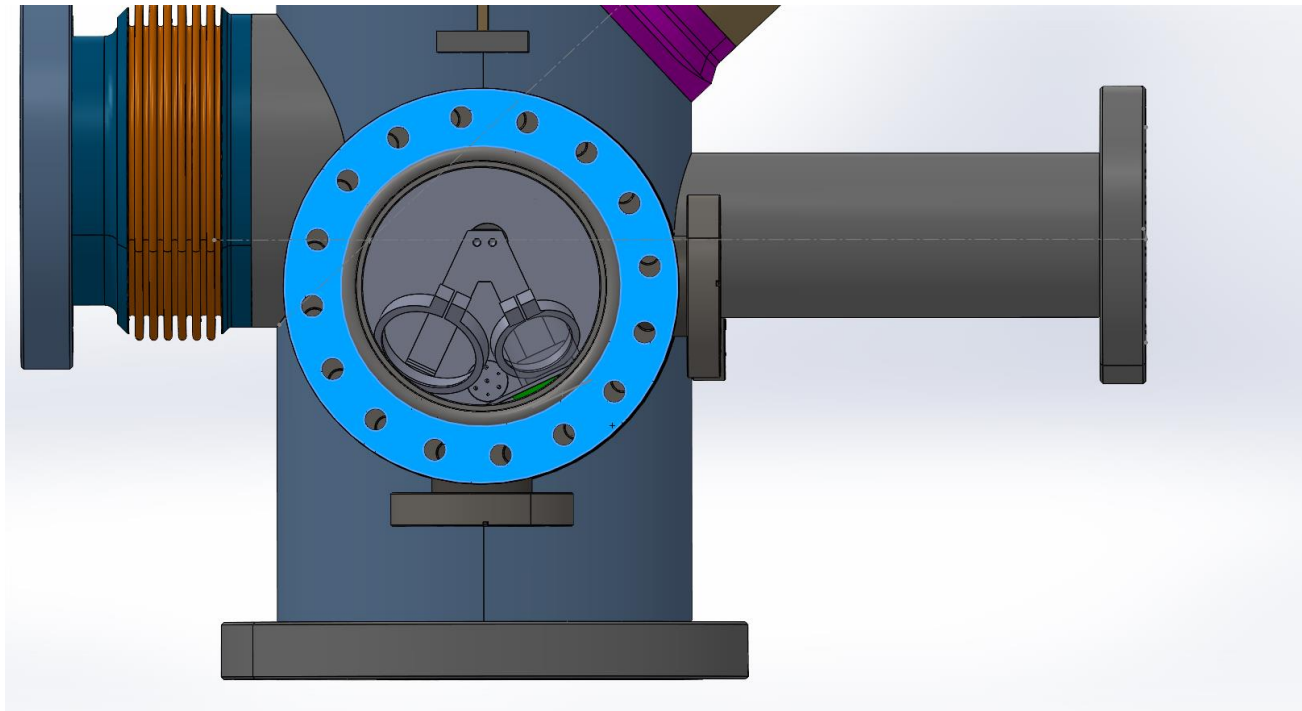
1T bellows assembly installation



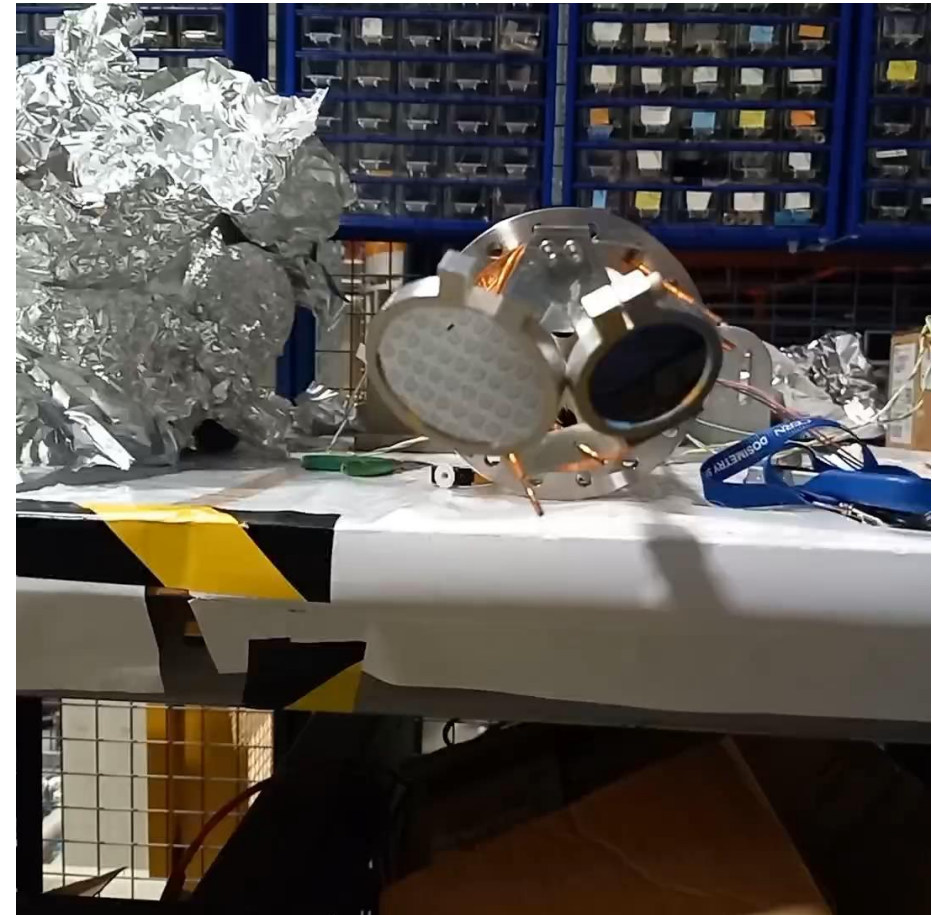
1T bellows assembly installation

- Installation process was very smooth
- Complete success from the mechanical point of view
- Vacuum level measured at GV12: 1×10^{-9}
- Opening of 150mm @ the 1T side without a heat shield created a large heat leak- estimated 8 Watt of (radiative) heat energy, translating to consumption of **4 extra dewars of LHe per week**
- Precise damage assessment and design of a heat shield ongoing with the help of CERN cryogenic dept (More on Thursday's talk)

Hedgehog detector assembly



Hedgehog detector assembly



Hedgehog detector assembly

- The MCP mirror shattered after baking (not enough spring effect?) and will have to be replaced
- The MCP did not work properly, the cabling has to be investigated
- We loose 10% of the beam...
- The project has to be redesigned (More on Thursday's talk)

