



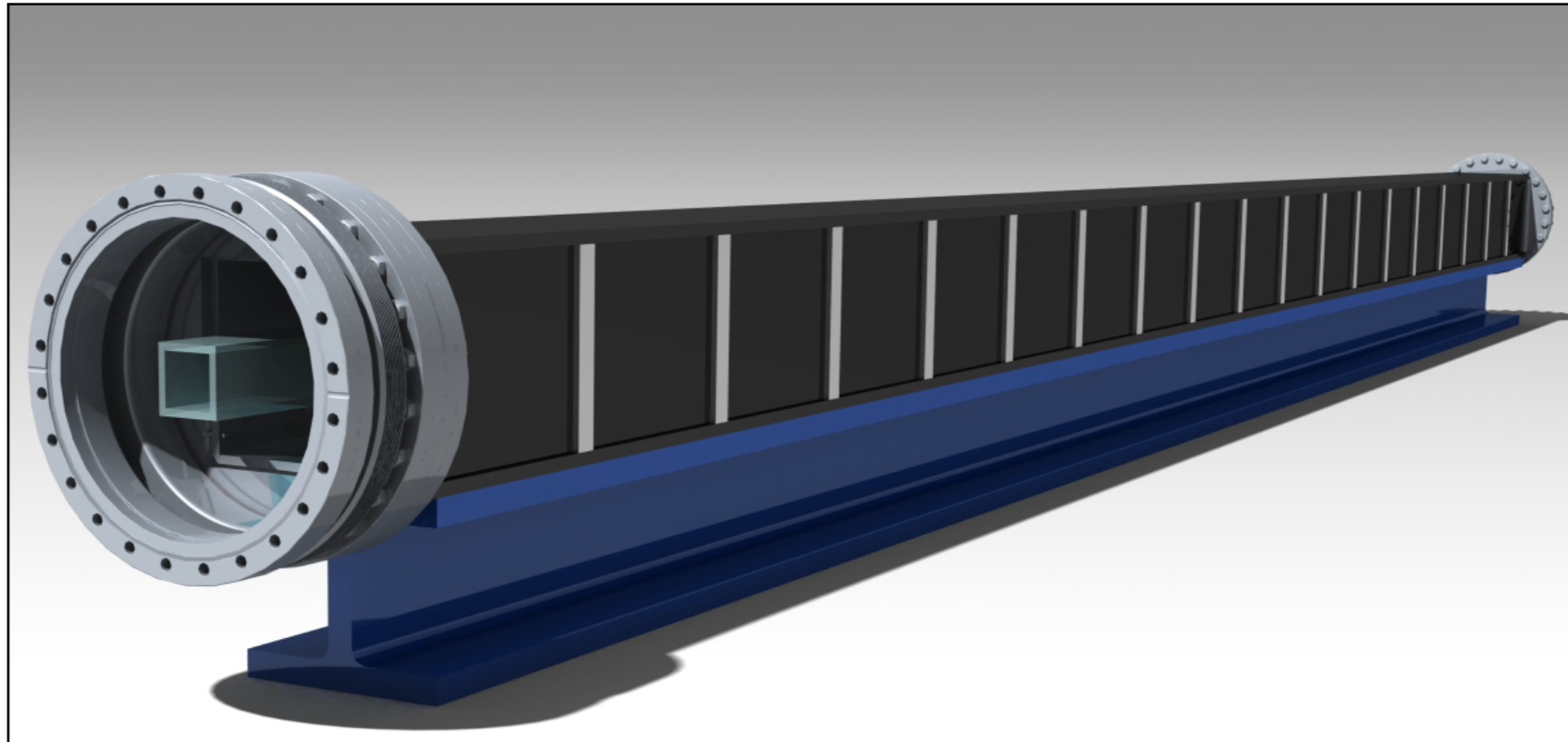
MAGiC: phase 2 progress

IKON13: 26/09/2017

General information

- LLB side
 - A CAD designer dedicated to MAGiC has been hired (Thibault Dupont, 01/08)
 - Focus on in-bunker elements, then bunker wall and out-bunker elements
 - Vacuum housing design finalized: real costing in progress
 - Thomas is working on the experimental cave
- JCNS side
 - Choppers: interface with MIRACLES has been discussed 15 mn ago, procurement strategy to be defined
 - Detectors: following DREAM by 6 months for the main detector. Strategy and opportunities for the small one to be defined.
- PSI
 - Christine is working on the analyzer design.
 - Detailed to be sorted out (blade length, sample size, divergence)

Detailed design



Vacuum housing: 4m long elements

2 guide elements to align inside.

Ensure vacuum

Hold the guide field magnets and soft iron plates

Allows dismounting of the guide elements/elements

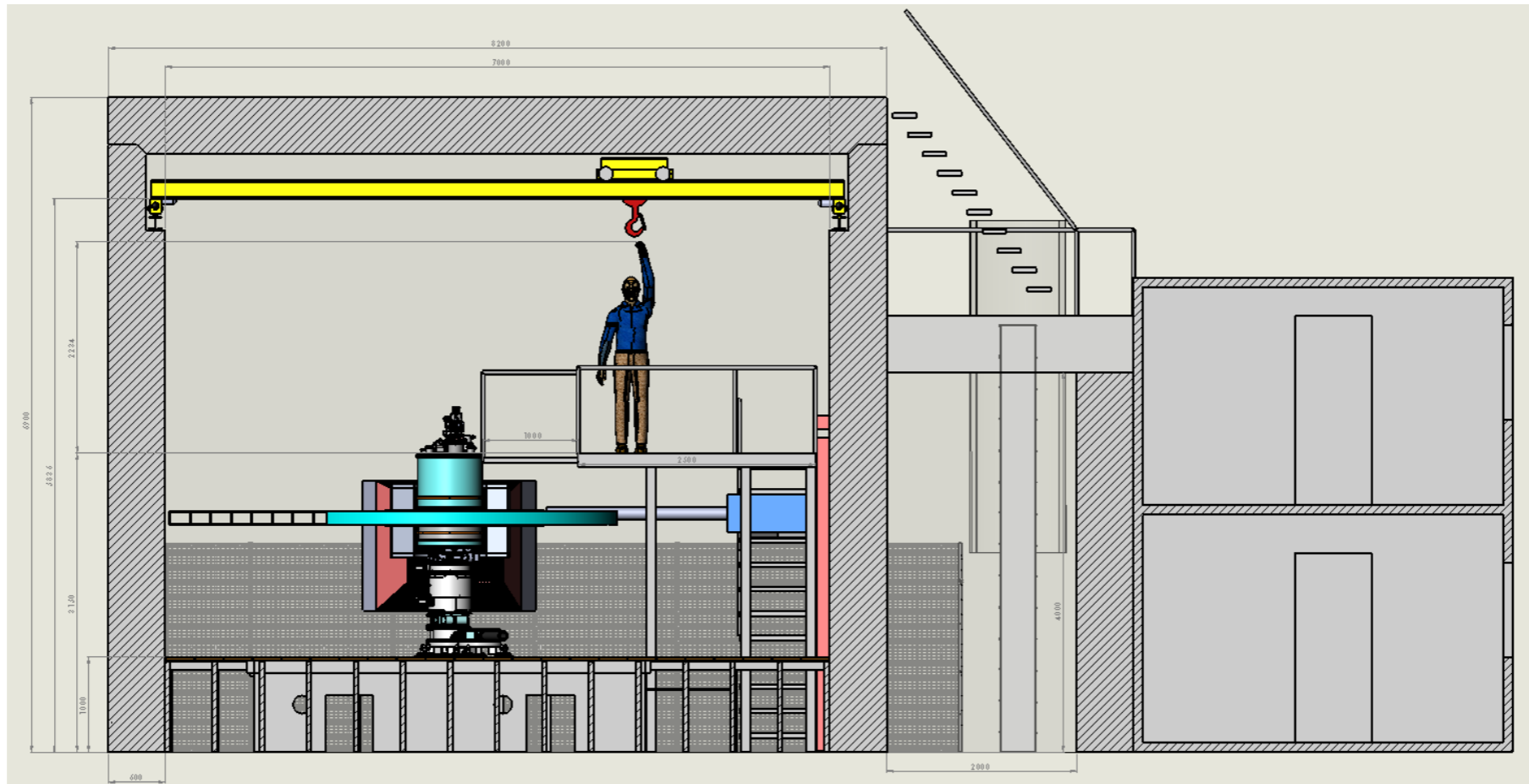
One beam as support every 4m

Alignement made on the beam

Laser tracker target on the flanges

Support in and out bunker to be defined !

Detailed design



Experimental cave

Biological shielding design
Easy to operate once built

SE access through main hall
2T crane for internal transport

Space above SE sufficient to extract
sample stick with ease

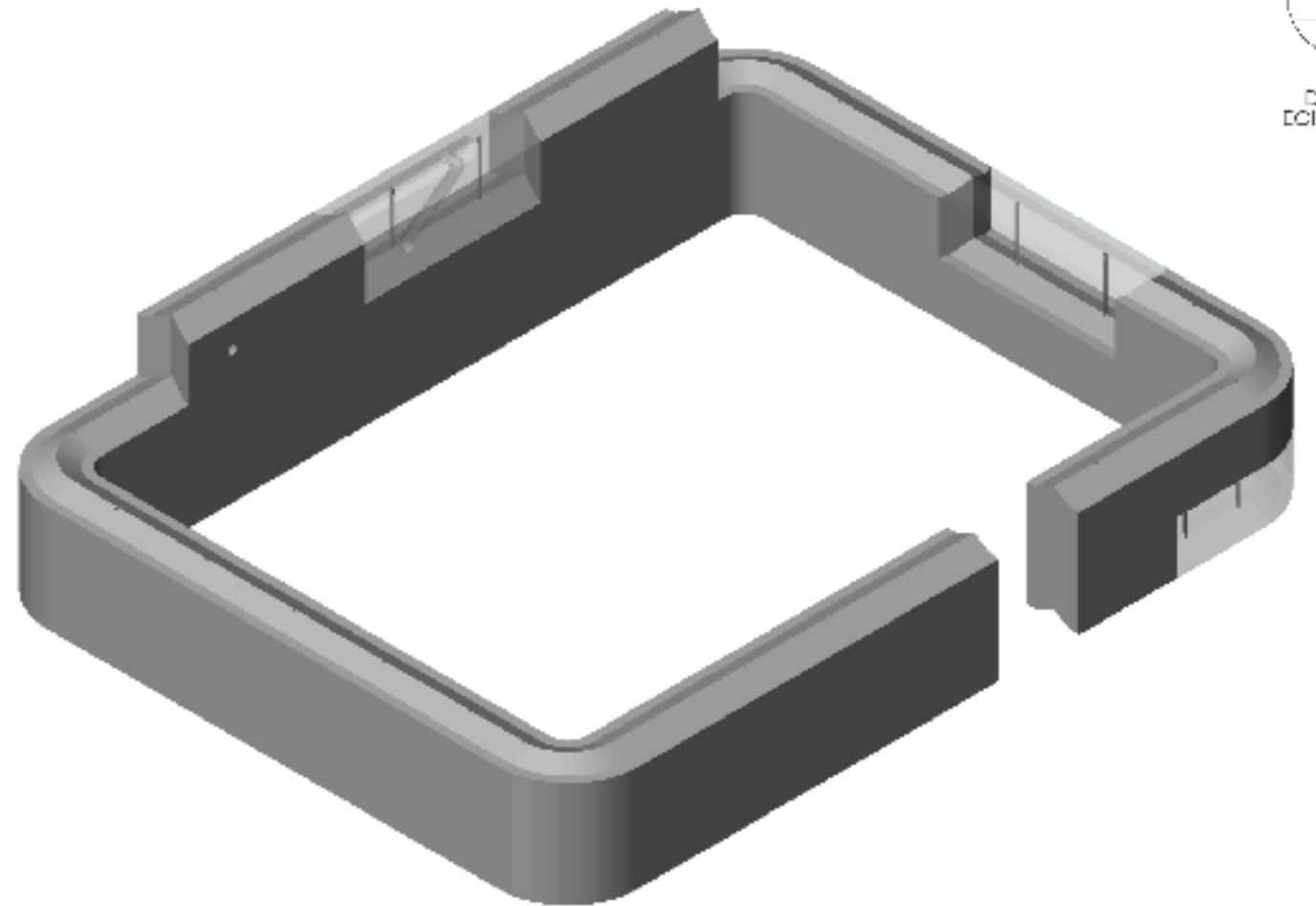
Additional storage on the side
Utilities access from the bottom

Detailed design



Pre-casted walls

- Clean
- Easy
- Efficient
- No direct line of sight possible
- Difficult to dismount
- Expensive



Modular blocks

- Cheap if standard
- Easy to build (lego like)
- Labyrinth built-in
- Expensive if customized (costing in progress) + longer built time
- Direct LoS possible

Administrative stuff

- TA for LLB: somewhere over the rainbow ... legal details/ exceptions/stuff to be sort out by CEA/CNRS and ESS.
- TA for PSI and JCNS ? Seems less critical
- Non blocking: we work without the TA anyway
- Meeting with the ESS technical groups in preparation to check all the interfaces and designs prior to TG3