



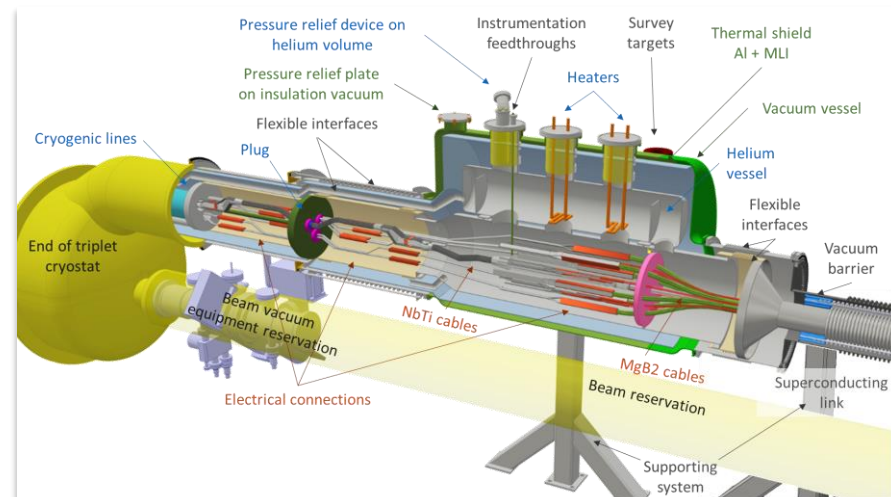
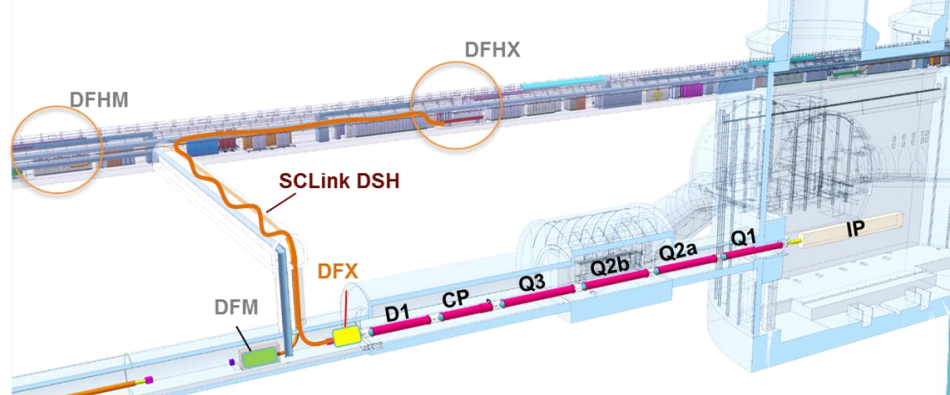
Interconnection boxes : DFX

Rehearsal : 26 June 2017

International Review of the Conceptual Design of the Cold Powering System for
the HL-LHC Superconducting Magnets : 3-4 July 2017

Outline

- Context : DFH-SCLink-DFX cryostat
- Planning
 - DFX, DFH design progress
 - Demonstrator design, manufacturing and testing
- DFX design in the cold powering scheme
 - Conceptual layouts
 - (Cryogenics, vacuum, mechanical, **electrical**)
 - Detailed design overview
 - Identified key technical challenges
 - (interfaces, plug, installation, thermal contractions, splice sequence, heaters...)
- Actions in progress
 - Plugs development in SMI2
 - Splices layout study – Mock-up in SMI2
- Next steps



Conclusions

- The DFX design detailed to today's knowledge
 - Key challenges identified
 - → Actions launched
 - → Use of LHC experience
 - Baseline concepts are integrated
 - Several technical challenges but no identified showstoppers
- Time to move the design efforts to:
 - DFH detailed design
 - Identification of key challenges → actions definition
 - Demonstrator detailed design

Open points

- Work is on-going
- No showstoppers identified so far...