

AD- CONS project status

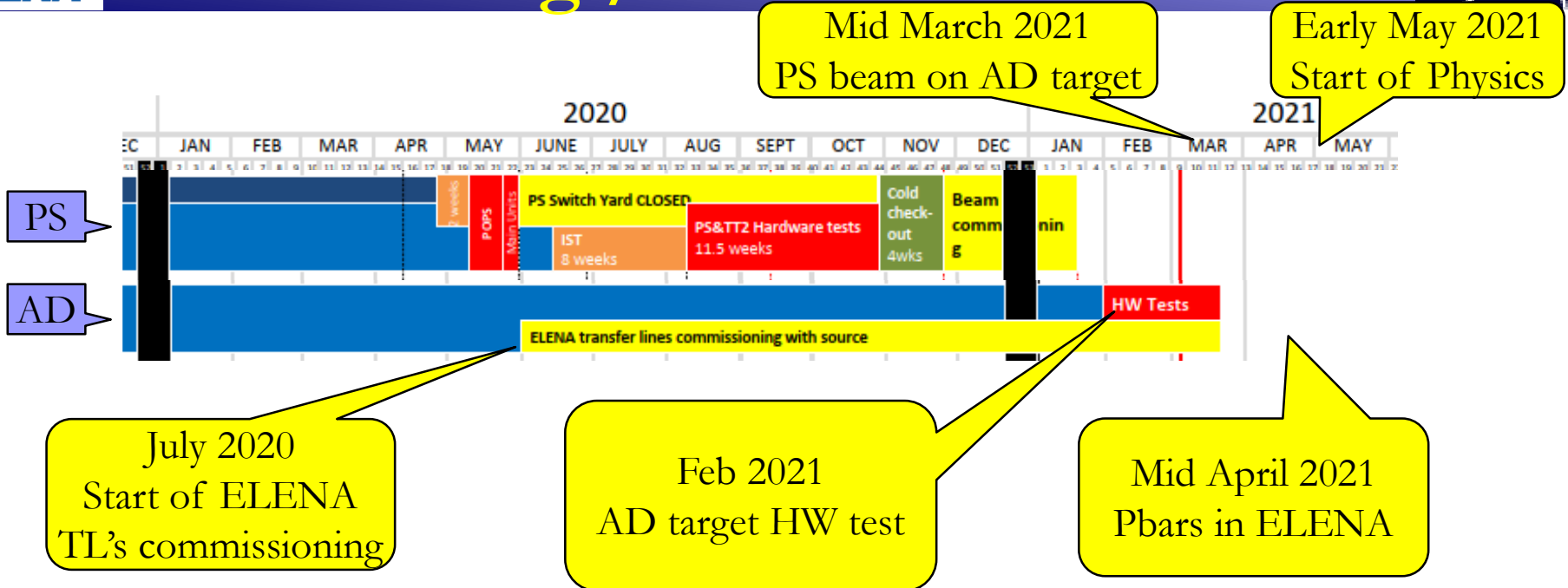


ANTIMATTER
FACTORY





PS / AD target / AD ring / ELENA ring / TLs coordination

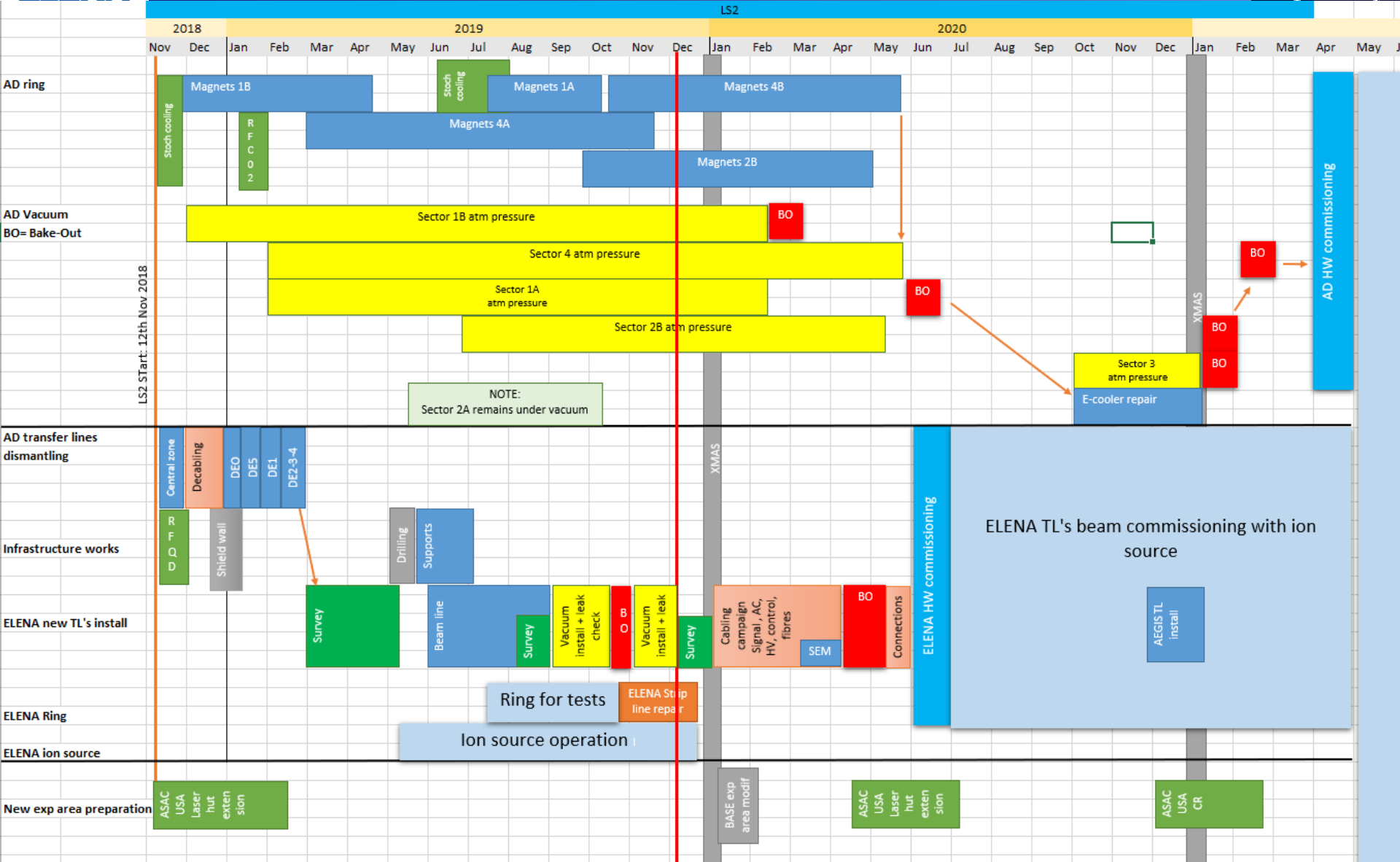
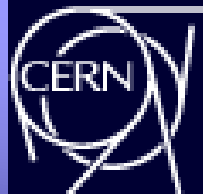


LS2 works critical path items:

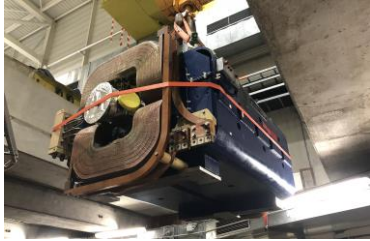
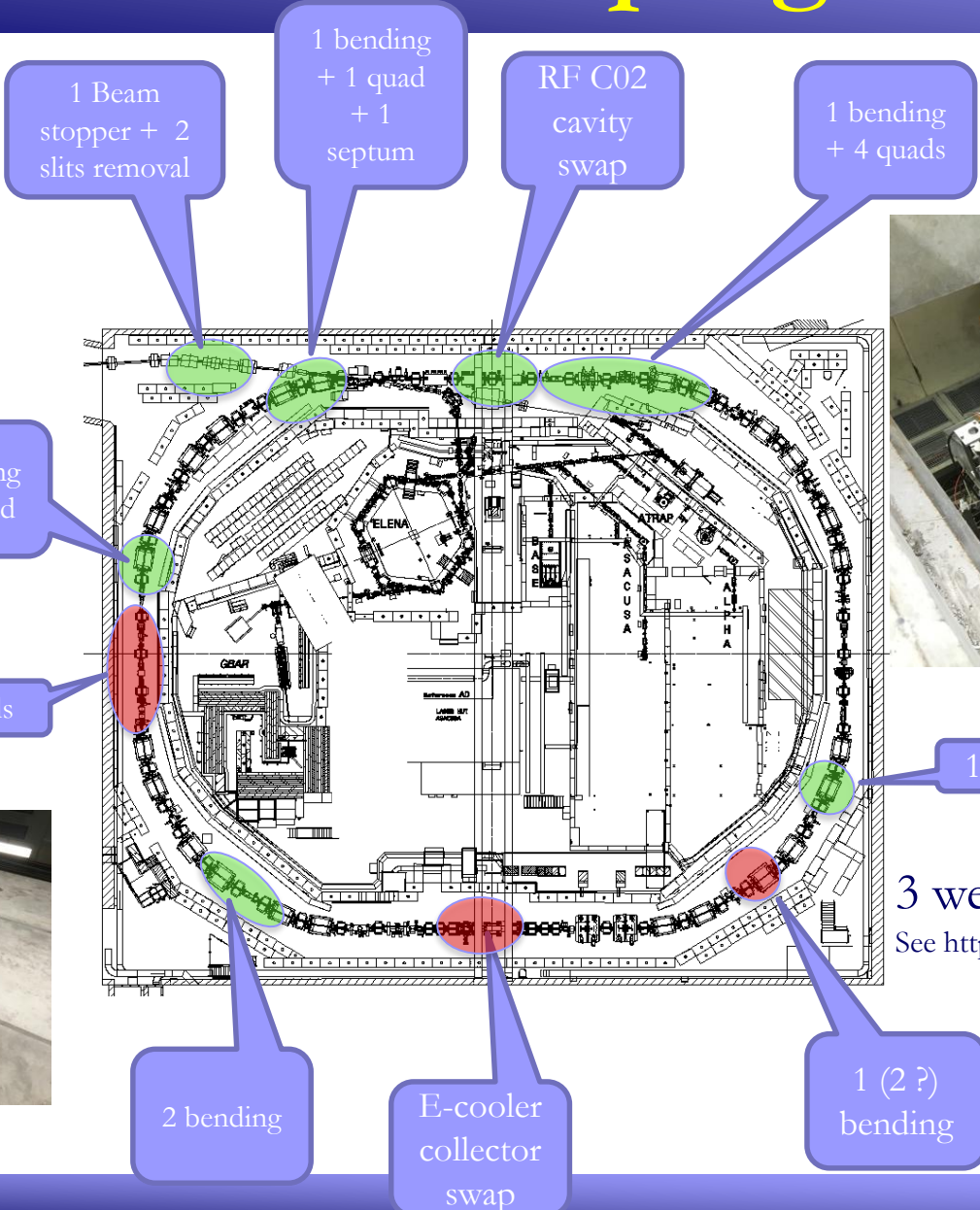
- AD ring : new e-cooler collector / vacuum bake-out
- ELENA ring: ion source / HV transformer
- ELENA transfer lines: Secondary Emission Monitors (SEM)



LS2 simplified schedule



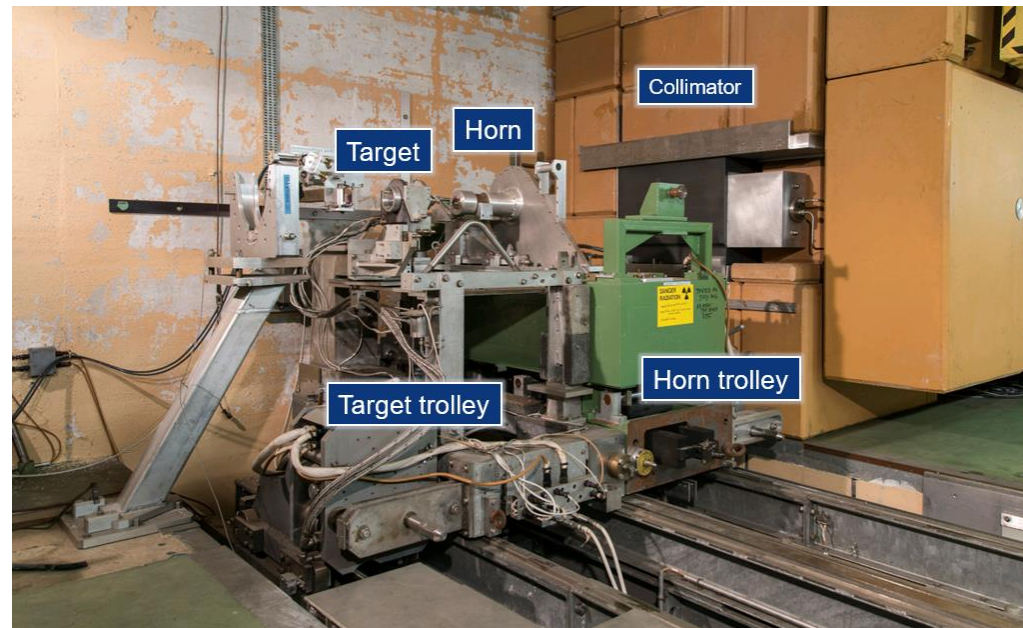
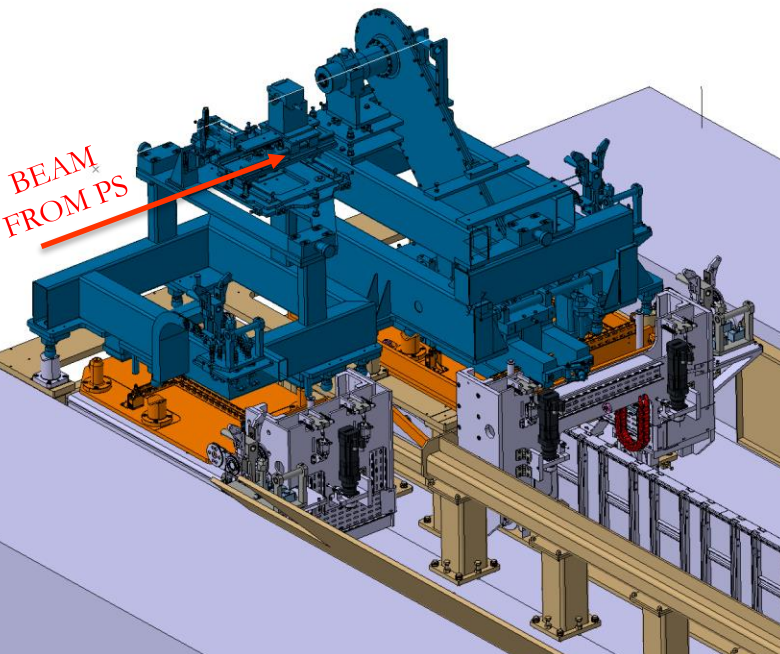
LS2 AD-CONS program (1)



3 weeks ahead of schedule

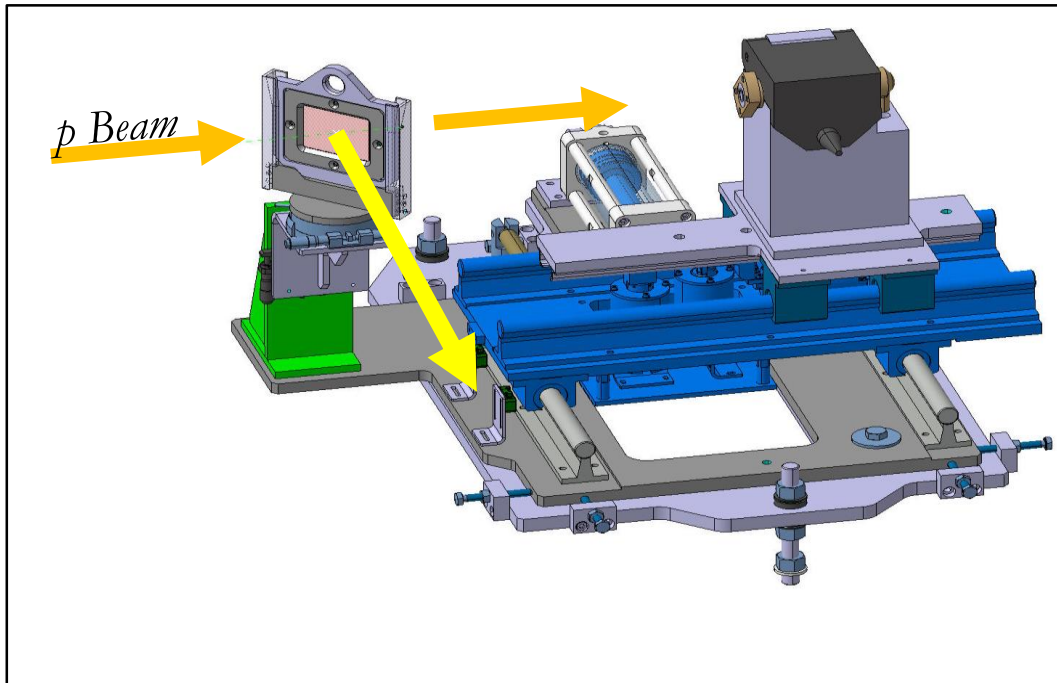
See <https://indico.cern.ch/event/867869/>

- AD target: good progress
- Details: <https://indico.cern.ch/event/867025/>

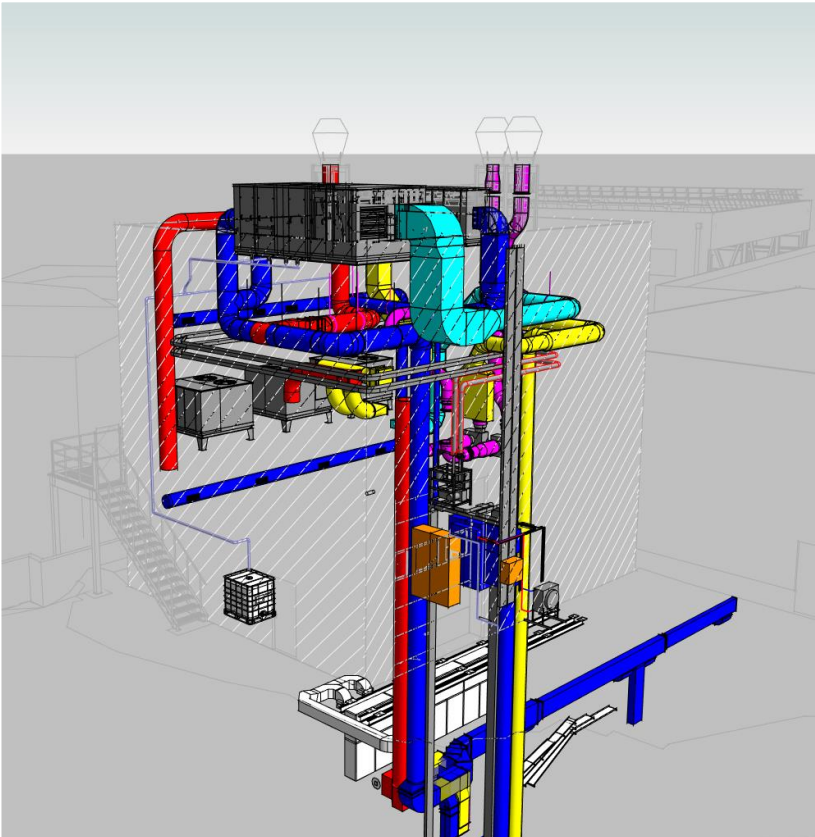


Courtesy: S. De Man

- Horn testbench →
- Instrumentation: new BPM
+ BCCCA consolidation ↓



- CV : AD target cooling in 2020. AD hall ventilation upgrade: LS3 ?

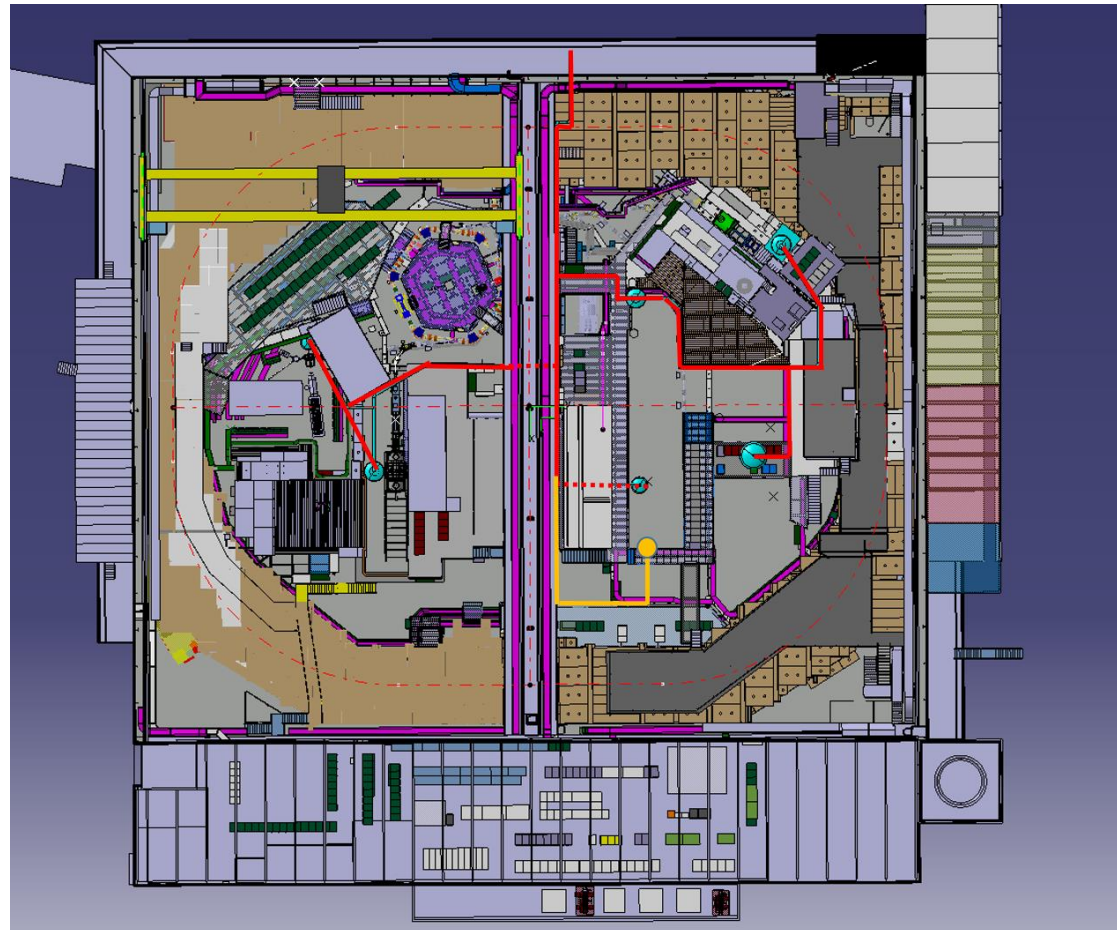


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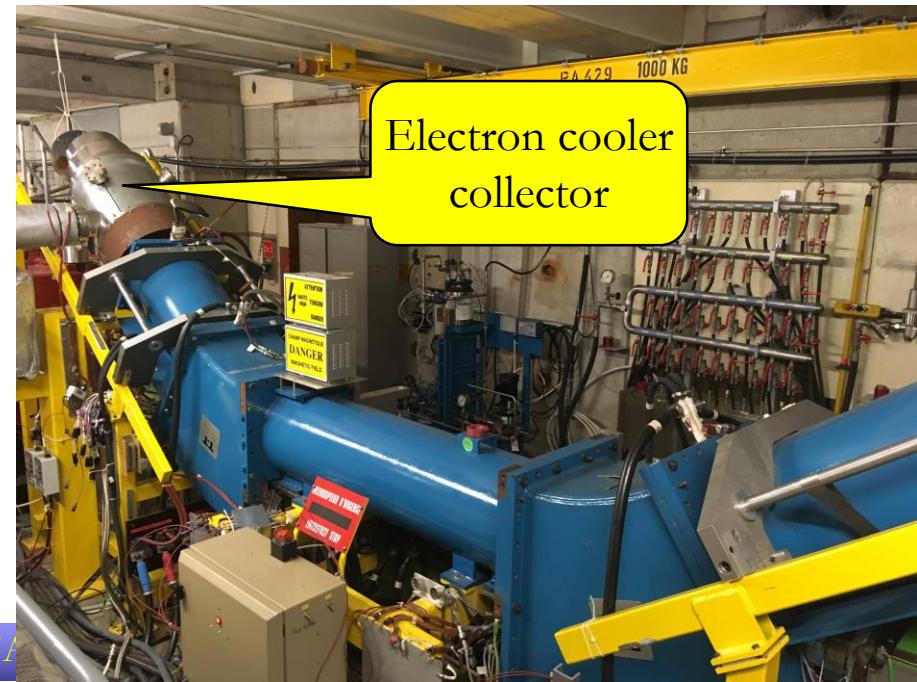
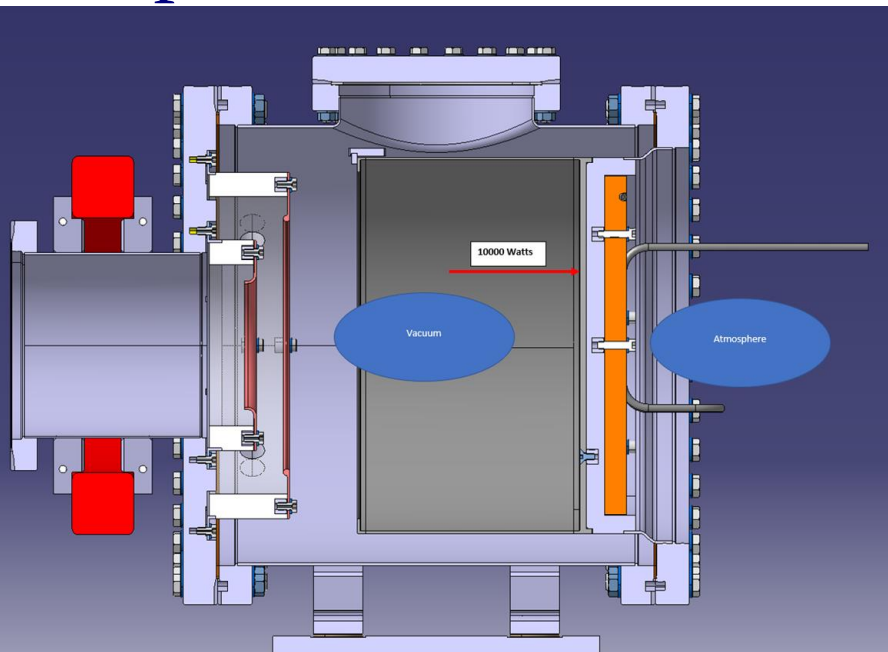
- HLRF CO₂ cavity replaced by Finemet, remains to be connected (Vac + cabling: Jan –March 2020)
- LLRF Radial loop, Cavity servoloop, gap relay control: syst production, development and lab tests till Oct 2020, then HW commissioning
- Power convertors: Upgrade to Megadiscap and Maxidiscap convertors planned for Spring 2020
- Vacuum upgrade complete (minor items remaining for LS2: ion pumps, damaged alu flanges...)
- Kickers: repair feedthroughs (done)

- Cryogenic distribution in AD hall:

- Pre-study done in 2018
- Installation planned for 2021
- Financially not approved yet



- AD e-cooler: the decision to build a new e-cooler for 2023 was confirmed 6 Dec 2019.
- A new collector is planned to be produced and installed during LS2. Design is in progress, installation is planned for Oct- Dec 2020.



- AD-CONS program well on its way
- AD e-cooler collector on critical path – recovery plan is to keep existing one
- Cryo distribution line not funded yet (again...)
- A number of re-organizations are getting prepared, in addition to existing baseline, owing to experiment related changes

