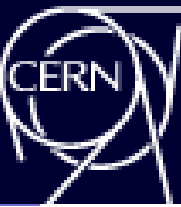




AD-CONS / ELENA Projects



ADUC 19th January 2021

AD facility consolidation

François BUTIN – BE-EA



ANTIMATTER
FACTORY



-Magnets refurbishment:

- status: LS2 program is complete, will continue till LS3 included
- Difficulties: extraction uneasy, many concrete blocks moved in tight environment
- Next: evaluate possibilities during (short) YETS 21-22 (2 quads, QDN12 and 13 ?)

-RF systems:

- Status: C02 cavity replaced by Finemet type (from PSB), LLRF integration with ELENA, C10 tubes being replaced
- Difficulties: qualified personnel availability in concurrence with PSB, LEIR
- Next: evaluate C10 future operation, review long term needs, extra budgets likely needed

-Vacuum:

- Status: ion pumps replacement: complete
- Difficulties: bake-out planning in concurrence with LHC
- Next: complete, no more needs foreseen

-AD e-cooler:

- Status: collector replacement production complete, tests in progress, some delays
- Difficulties: uncertainty on availability in time
- Next: decide on installation of new collector in April 21, depending on delays



-Stochastic cooling:

- Status: amplifiers re-installation in progress
- Difficulties: no visibility on program till and including LS3 (pick-up + kicker refurbishment likely needed), loss of knowledge
- Next: review project, date, define budgets needed



-Target renovation:

- Status: in progress
- Difficulties: some delays COVID related, impact on physics restart
- Next: Commissioning expected to start in June 2021

-Cryo distribution system:

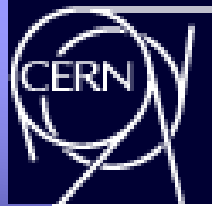
- Status: project launched, fellow started gathering info and designing system
- Difficulties: get adequate priority level withing CRG projects
- Next: get technical spec in summer 2021

-Cooling and ventilation:

- Status: stalled
- Difficulties: get required priority level
- Next: refine cost estimates, get project schedule for summer 2021



AD-CONS WP's (continued)



-AD cranes refurbishment:

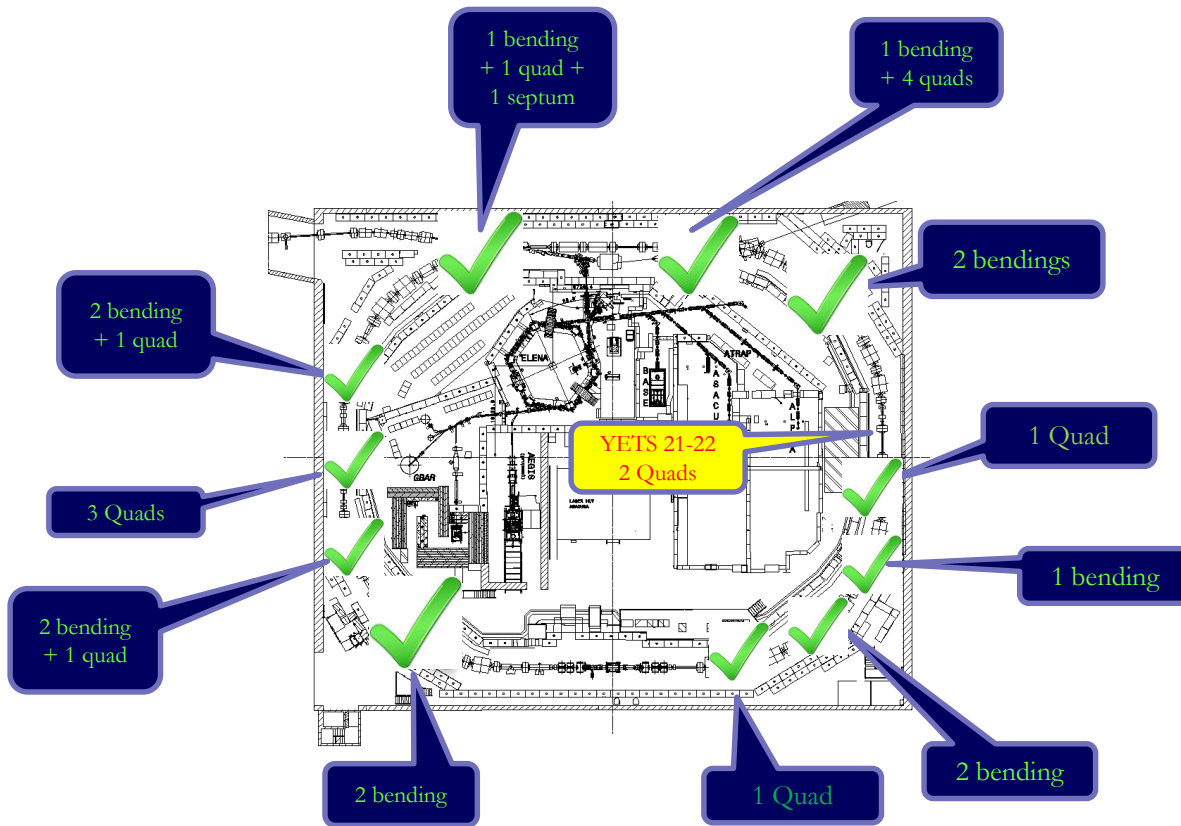
- Status: planned for 2022-2023
- Difficulties: none
- Next: review project end 2021

-Magnetic Horn:

- Status: complete
- Difficulties: none
- Next: power cables and transmission line were mentioned as additional work, but not confirmed

-AD-CONS project management:

- Status: **WPs update summary document** ready, distributed in Eng check
- Project Management Plan** document ready to be circulated for Eng check
- C&S review to be planned for 2021

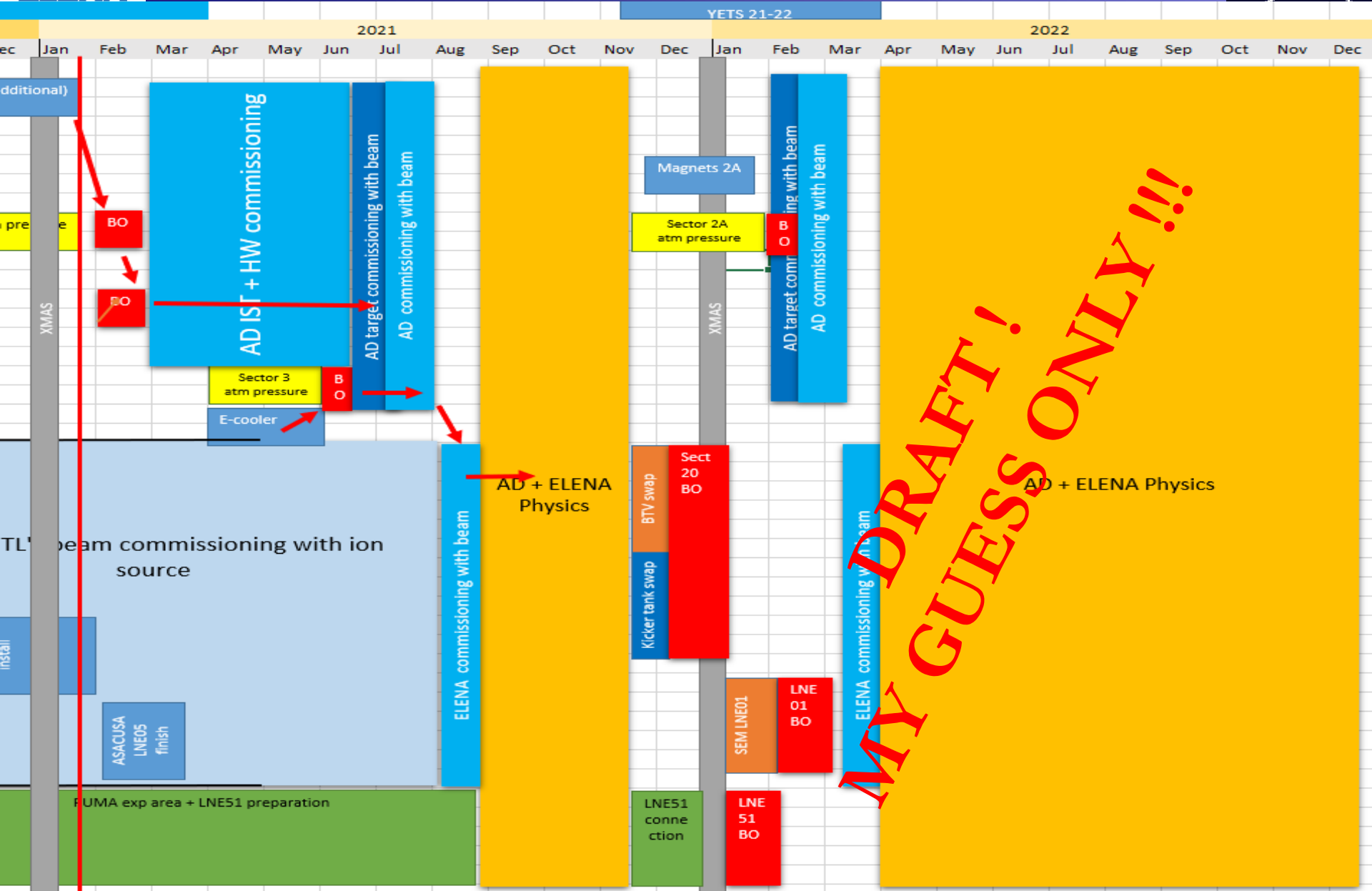
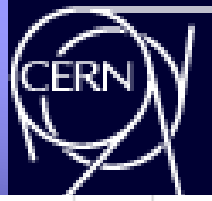


Work consists in opening magnets, replace shimming, check insulation, cooling, connectors, Perform measurement and certification

All connections will now be protected to be IP3 (fully exposed till now)



Context 2021 restart ...and stop

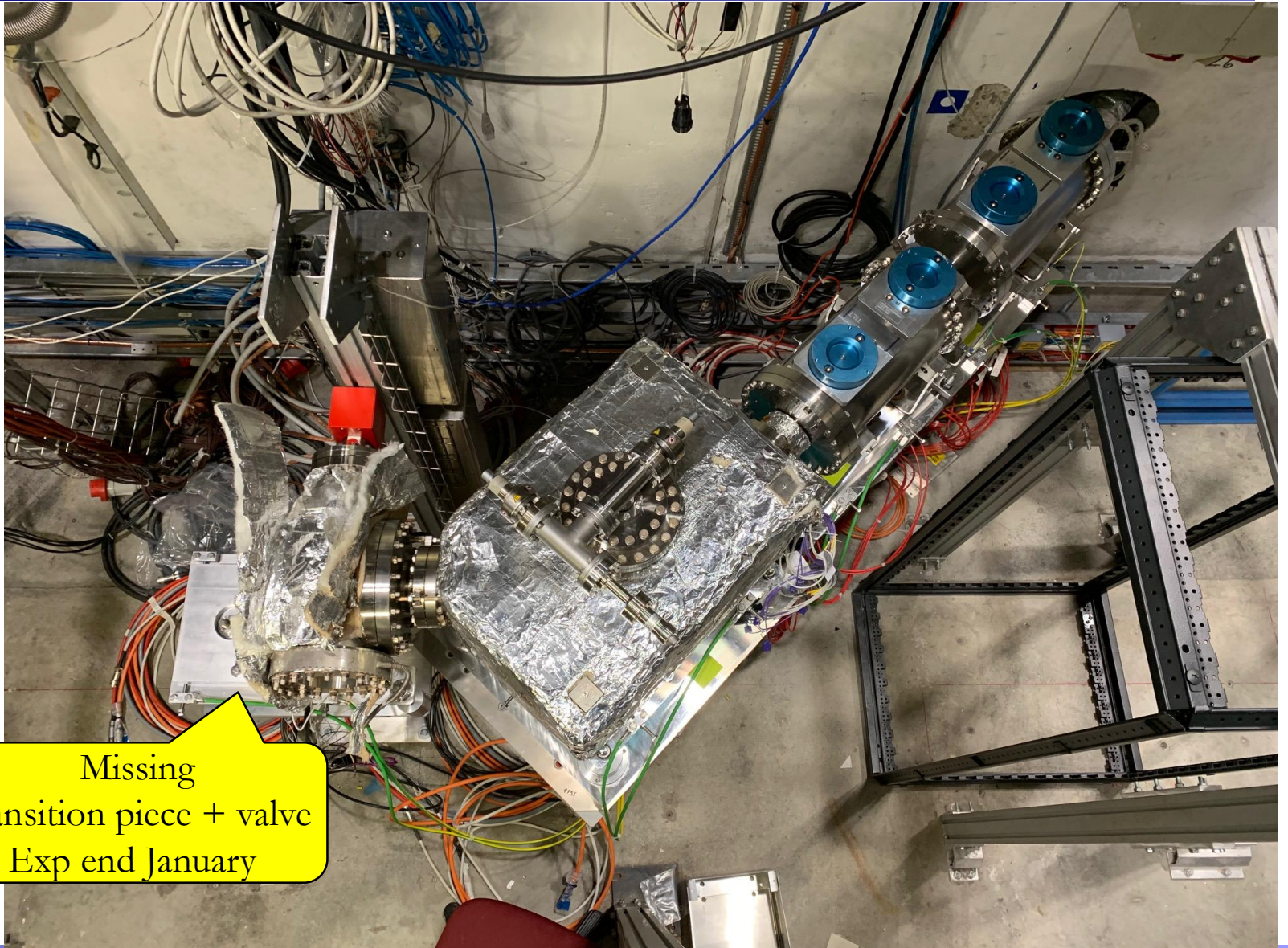


Aegis exp area improvement



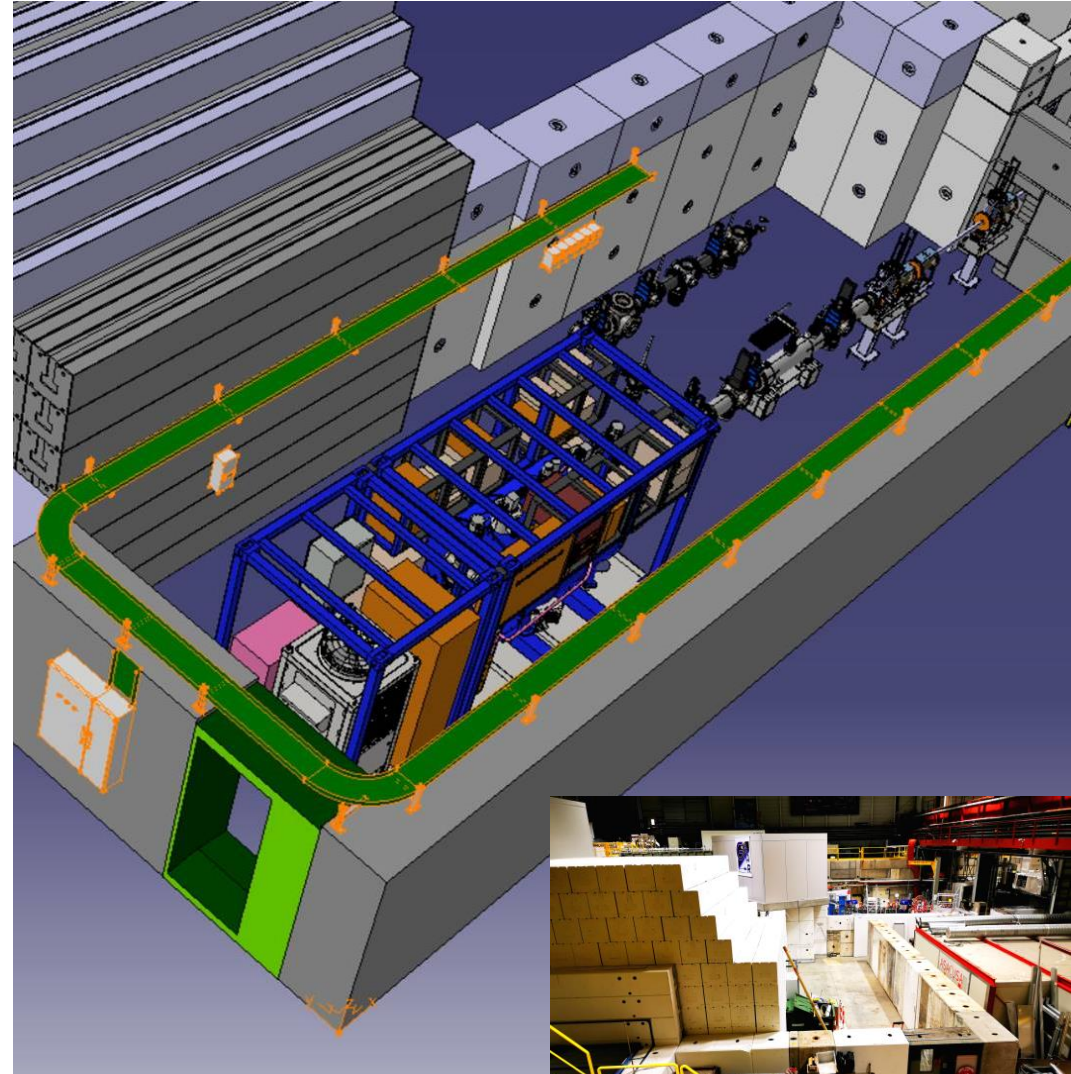
New wall to protect
Aegis exp area

LNE02 (Aegis) TL installation

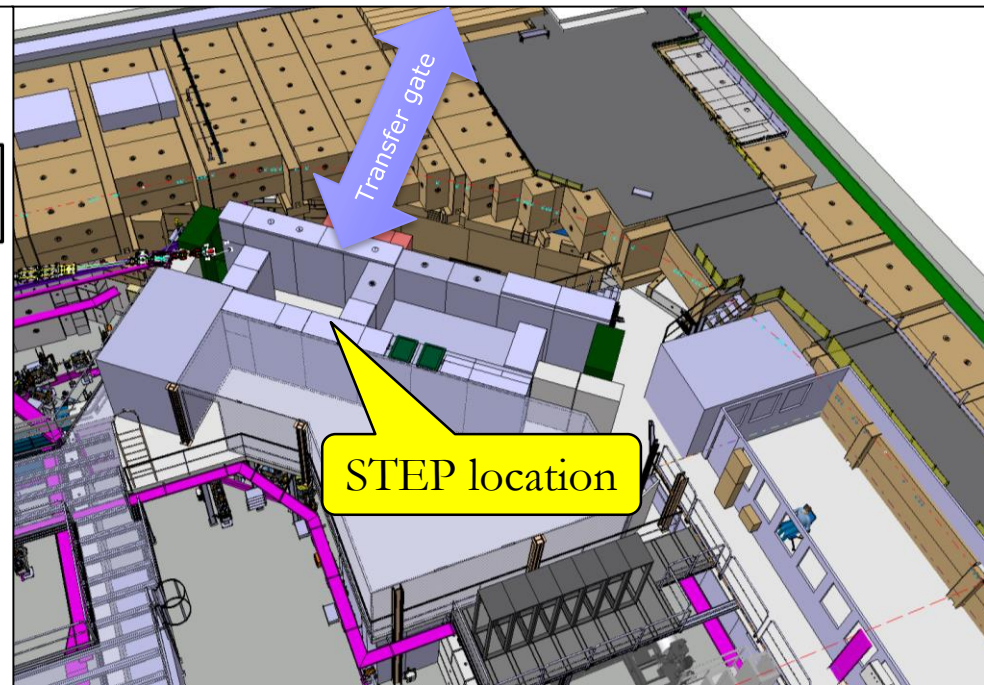
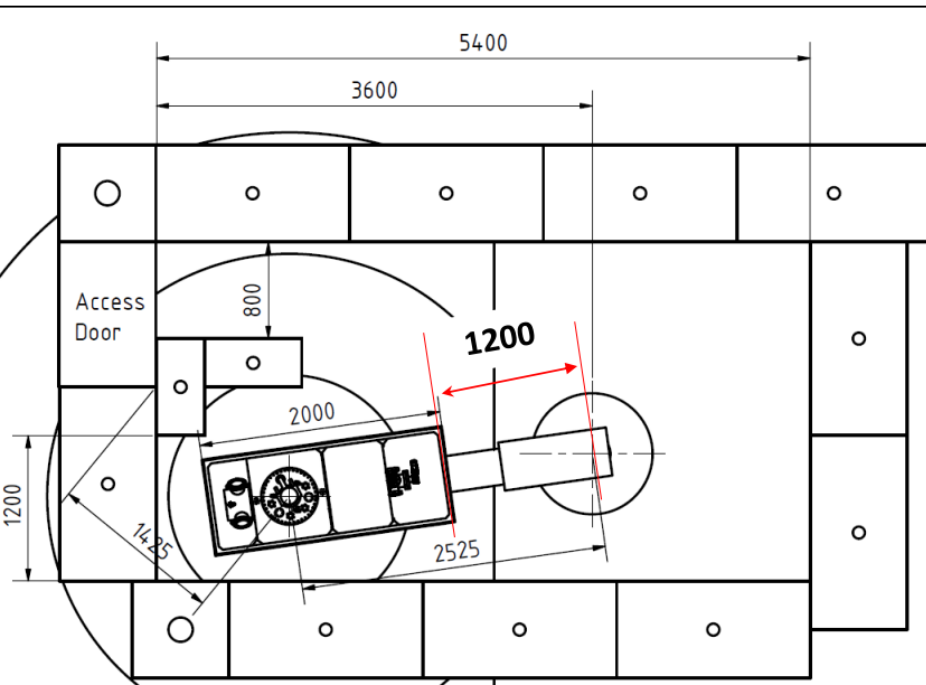


Missing
transition piece + valve
Exp end January

- PUMA is approved at AD
- Experimental area being installed, expected complete in April
- New transfer line LNE51 installation about to start, expected complete in July – connection to ELENA ring in November
- Start of experiment components installation as of Autumn
- PUMA trap delivery date to be confirmed



- STEP not yet approved, but soon !
- Encouraged to start preparing exp area
- Site of ex-ATRAP1 chosen (LNE01 ELENA transfer line)
- Detailed installation planning to be clarified
- Aiming at pbars trapping in 2023

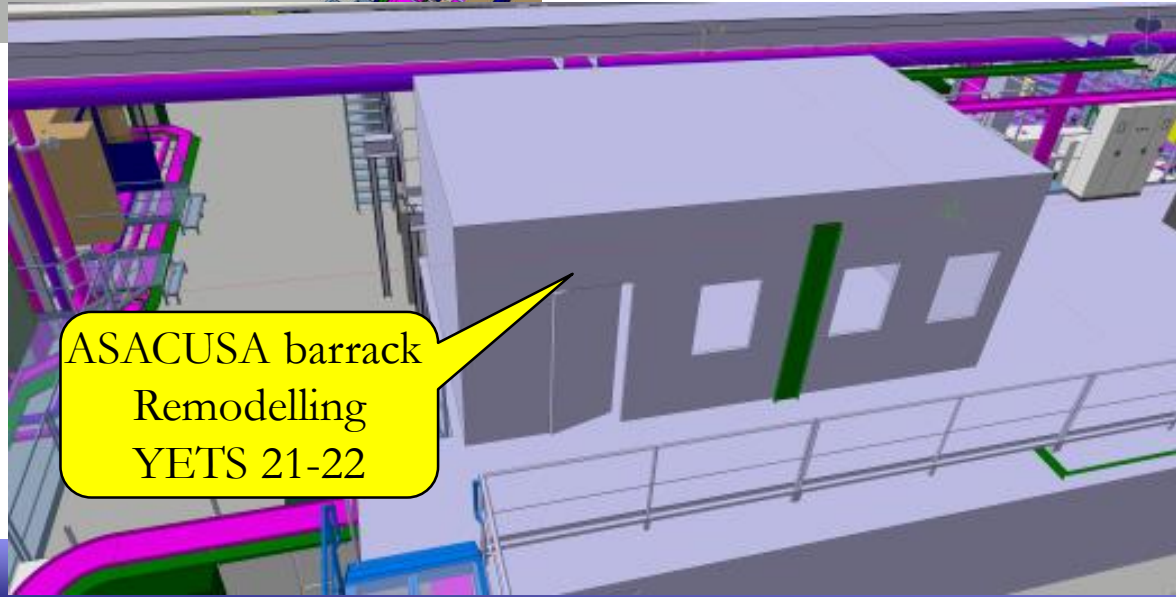




New platform
(PUMA / BASE / ASACUSA)
Spring 21

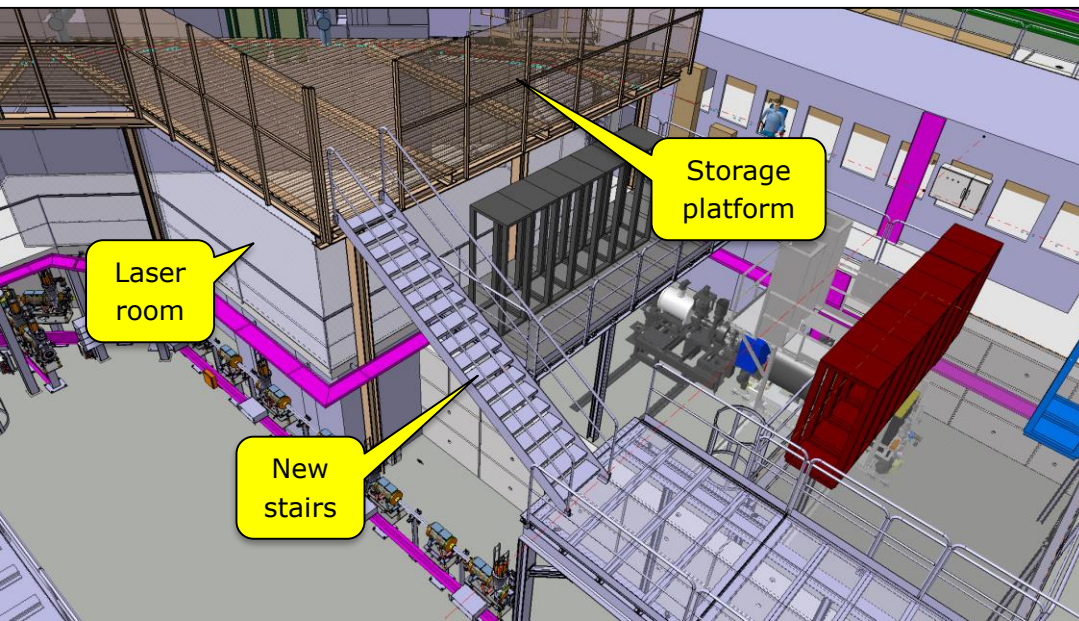
ALPHA barrack
YETS 22-23




BIG cleaning of AD hall initiated
-ELENA zone done
-Remaining zones in February
-PLEASE CLEAR AS MUCH STUFF
as possible to make the cleaning
process effective



ASACUSA barrack
Remodelling
YETS 21-22

- Converging to an approved doc
- Only snagging point is access to platform above ex-ATRAP laser room
- Proposed to be from ASACUSA rack platform



 Esplanade des Particules 1 1217 Meyrin - Switzerland		EDMS NO. 2360097	REV. 0.3	VALIDITY DRAFT
 		REFERENCE AD-LJ-EC-0018		
Date: 2020-12-04				
ENGINEERING CHANGE REQUEST Re-allocation of Surfaces Formerly Occupied by ATRAP Experiment				
BRIEF DESCRIPTION OF THE PROPOSED CHANGE(S): This ECR describes the request for re-allocating the surfaces previously occupied by ATRAP experiment in the AD facility.				
DOCUMENT PREPARED BY: François BUTIN (EN-EA) Stefan ULMER (EP-UAD)	DOCUMENT CHECKED BY: M. Hori, V.Maeckel, E. Widman, J. Hangst, N. Madsen, C. Smorra, P. Perez, J.Y. Roussé, M. Doser, S. Haider, A. Rigamonti, B. Lefort, L.Ponce, C. Carli, G. Kahtri, G. Gabrielse, C. Ahdda,	DOCUMENT TO BE APPROVED BY: Markus Brugger EATM chairman		
DOCUMENT SENT FOR INFORMATION TO: AD_Users, R. Charousset, M. Marcondella				
				
SUMMARY OF THE ACTIONS TO BE UNDERTAKEN: [List the main actions to be undertaken]				