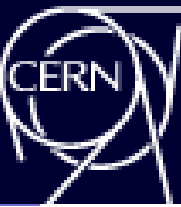




# ELENA Project



## TRANSFER LINES INSTALLATION LS2

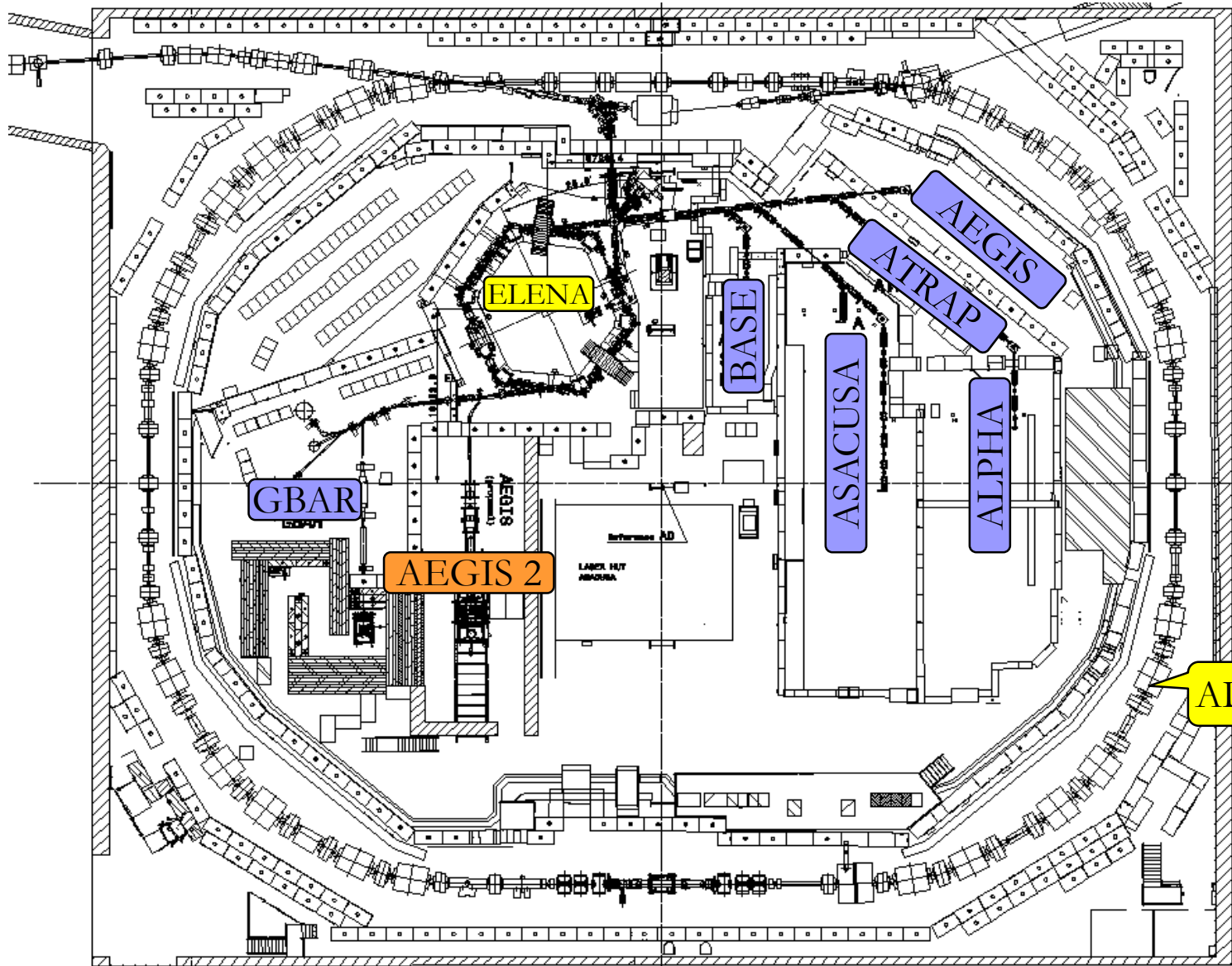


ANTIMATTER  
FACTORY

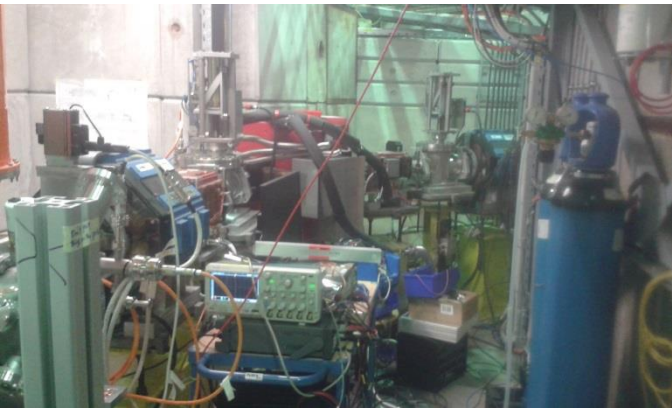




# ELENA in AD hall



AD machine



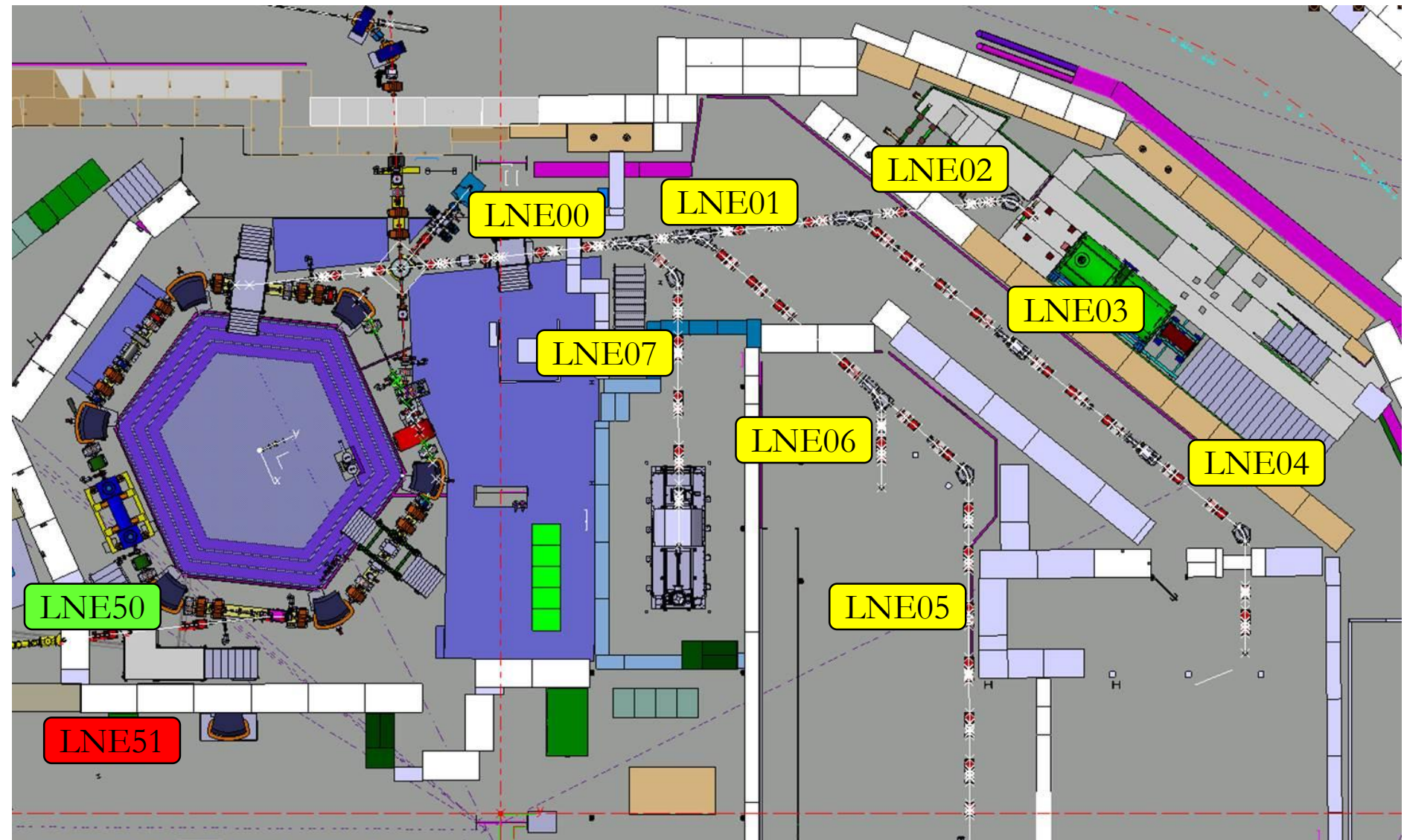
Existing  
magnetic  
TLs to be  
replaced by  
electrostatic  
TLs



- Lock-out, cables disconnection, flexible cooling pipes disconnection
- Remove all magnetic transfer lines plus corresponding supports
- Remove all corresponding cables
- Re-organize part of the shielding walls
- Re-route cable trays and water pipes
- Install electrostatic transfer lines, instrumentation, vacuum and services
- Commission new transfer lines

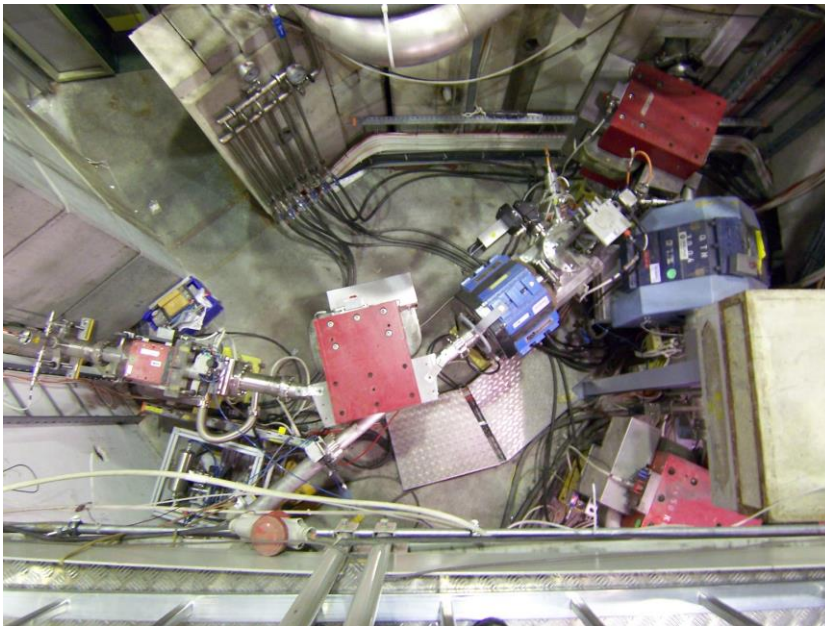


# Electrostatic lines to be installed



TIME

Lock-out / disconnect cables/pipes from equipment	Eq Owners CV	12 Nov 2018 – 16 Nov 2018
Vacuum disconnection central part	VSC	16 Nov 2018 – 19 Nov 2018
Remove equipment central part (Vac, GEM, Magnets)	Eq Owners CV, HE, MSC	20 Nov 2018 – 23 Nov 2018
Remove cables and cable trays	EL	26 Nov 2018 – 21 Dec 2018



Central Region



# In parallel: RFQD dismantling

RFQD racks, power supplies, Faraday cage removal

EPC, EA  
RF, HE

12 Nov 2018 – 28 Nov 2018

RFQD RF amplifier removal

RF, HE

22 Nov 2018 – 28 Nov 2018

ATRAP workshop/stuff removal

ATRAP, HE

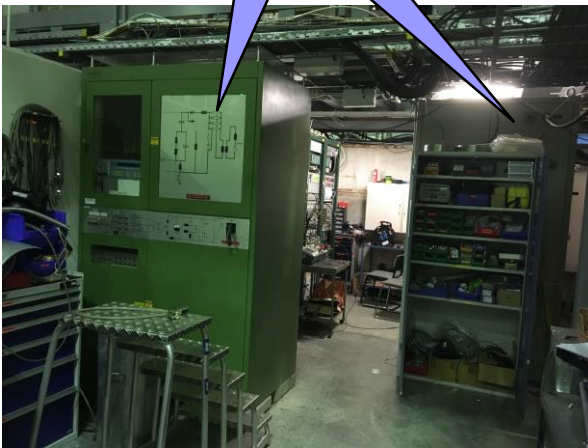
12 Nov 2018 – 23 Nov 2018

Stochastic cooling equipment removal

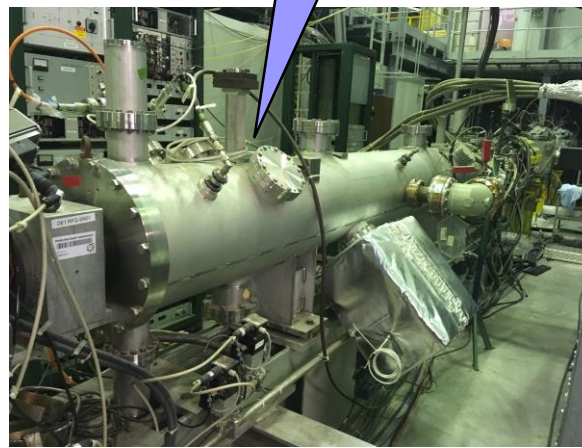
RF, HE

13 Nov 2018 – 26 Nov 2018

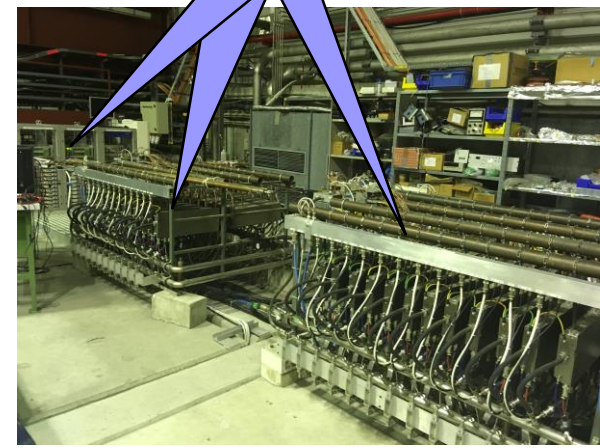
RFQD PS



RFQD



Stoch cooling



TIME

Shielding wall modifs

HE, CV

27 Nov 2018 – 04 Feb 2019

Remove DE0 line (Vac, GEM, Magnets), inside shielding

Eq Owners  
CV, HE, MSC

7 Dec 2018 – 08 Jan 2019

Remove BASE TL

Eq Owners  
CV, HE, MSC

05 Feb 2019 – 19 Feb 2019

Remove ASACUSA TL

Eq Owners  
CV, HE, MSC

20 Feb 2019 – 08 Mar 2019

Remove ATRAP/ALPHA TL

Eq Owners  
CV, HE, MSC

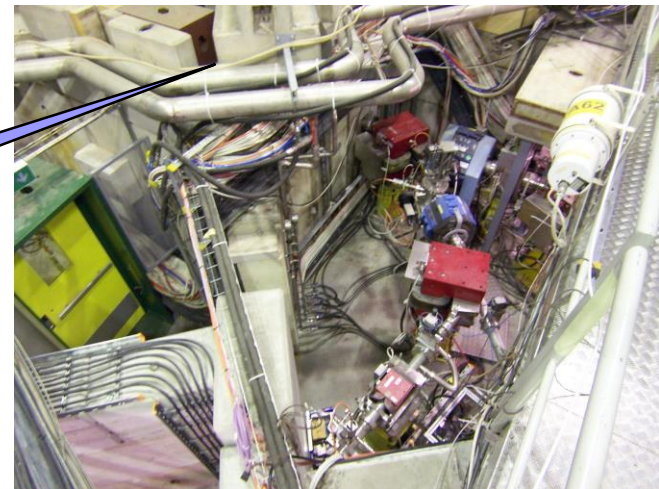
11 Mar 2019 – 04 Apr 2019

TIME



DE0

Shield wall





# Installation of the new lines



Survey Marking	SU	05 Feb 2019– 11 Mar 2019
Floor drilling	MME	26 Mar 2019– 08 Apr 2019
Install mechanical supports	MME	09 Apr 2019– 29 Apr 2019
Install Equipment (Electrostatic + vacuum + SEM)	ABT, VSC HE	30 Apr 2019– 20 May 2019
Survey /Align Equipment	SU	21 May 2019– 18 Jun 2019
Vacuum connections + baking equip.	VSC	19 Jun 2019– 12 Aug 2019
Cabling campaign (signal, AC, optical fibres)	EL	06 Jan 2020 – 03 Mar 2020
Pump and bake-out	VSC	06 Apr 2020 – 02 Jun 2020
Global commissioning	All + OP	03 Jun 2020 – AD restart 2021

- About 18 months of intense activity for ELENA
- To be done in parallel with AD machine consolidation / AD hall infrastructure works / BASE exp area extension / AD target renovation / potentially AEGIS relocation...
- Will follow-up planning details through IIC and ADTC meetings thursdays PM.

