



AD-CONS / ELENA Projects



AD / ELENA Ongoing works + prospects



ANTIMATTER
FACTORY



AD magnets refurbishment

Refurbishment BHN40						Refurbishment QDN41						Reinstallation BHN40					
Refurbishment BHN40						TE-MSC	8 wks	Mon 01/07/19	Fri 23/08/19	TE-MSC	8 wks	Mon 22/07/19	Mon 22/07/19	TE-MSC	8 wks	Mon 22/07/19	
Refurbishment QDN41						TE-MSC	8 wks	Tue 28/05/19	Mon 22/07/19	EN-HE	2 days	Mon 26/08/19	Tue 27/08/19	EN-HE	2 days	Mon 26/08/19	
Open shielding						EN-HE	2 days	Mon 26/08/19	Tue 27/08/19	EN-HE	2 days	Mon 26/08/19	Tue 27/08/19	EN-HE	2 days	Mon 26/08/19	
Reinstallation BHN40						EN-HE,TE-MSC,EN-S	0.5 days	Wed 28/08/19	Wed 28/08/19	EN-HE,TE-MSC,EN-S	0.5 days	Wed 28/08/19	Wed 28/08/19	EN-HE,TE-MSC,EN-S	0.5 days	Wed 28/08/19	
Reinstallation QDN41						EN-HE,TE-MSC,EN-S	0.5 days	Wed 28/08/19	Wed 28/08/19	EN-HE	2 days	Thu 29/08/19	Fri 30/08/19	EN-HE	2 days	Thu 29/08/19	
Close shielding						EN-HE	2 days	Thu 29/08/19	Fri 30/08/19	EN-HE	2 days	Thu 29/08/19	Fri 30/08/19	EN-HE	2 days	Thu 29/08/19	
Align re-installed magnets						EN-SMM	10 days	Fri 18/10/19	Thu 31/10/19	EN-SMM	10 days	Fri 18/10/19	Thu 31/10/19	EN-SMM	10 days	Fri 18/10/19	
Magnet group 1A							76.5 day	Fri 05/07/19	Mon 21/10/19								
QDC53 + SME5305							68.5 day	Fri 05/07/19	Wed 09/10/19								
Open shielding (1 beam + 18 blocks)						EN-HE	1 wk	Fri 05/07/19	Fri 12/07/19	EN-HE	1 wk	Fri 05/07/19	Fri 12/07/19	EN-HE	1 wk	Fri 05/07/19	
Removal QDC53						EN-HE,TE-MSC,TE-V!	1 day	Fri 12/07/19	Mon 15/07/19	EN-HE,TE-MSC,TE-V!	1 day	Fri 12/07/19	Mon 15/07/19	EN-HE,TE-MSC,TE-V!	1 day	Fri 12/07/19	
Close shielding						EN-HE	3 days	Mon 15/07/19	Thu 18/07/19	EN-HE	3 days	Mon 15/07/19	Thu 18/07/19	EN-HE	3 days	Mon 15/07/19	
Refurbishment QDC53						TE-MSC	7 wks	Mon 05/08/19	Fri 20/09/19	TE-MSC	7 wks	Mon 05/08/19	Fri 20/09/19	TE-MSC	7 wks	Mon 05/08/19	
Open shielding						EN-HE	3 days	Fri 27/09/19	Tue 01/10/19	EN-HE	3 days	Fri 27/09/19	Tue 01/10/19	EN-HE	3 days	Fri 27/09/19	
Swap SME5305						EN-HE,TE-VSC	2 days	Wed 02/10/19	Thu 03/10/19	EN-HE,TE-VSC	2 days	Wed 02/10/19	Thu 03/10/19	EN-HE,TE-VSC	2 days	Wed 02/10/19	
Reinstallation QDC53						EN-HE,TE-MSC,BE-B	1 day	Fri 04/10/19	Fri 04/10/19	EN-HE,TE-MSC,BE-B	1 day	Fri 04/10/19	Fri 04/10/19	EN-HE,TE-MSC,BE-B	1 day	Fri 04/10/19	
Close shielding						EN-HE	3 days	Mon 07/10/19	Wed 09/10/19	EN-HE	3 days	Mon 07/10/19	Wed 09/10/19	EN-HE	3 days	Mon 07/10/19	
BHN51							71.5 day	Fri 12/07/19	Mon 21/10/19								
Open shielding						EN-HE	3 days	Fri 12/07/19	Wed 17/07/19	EN-HE	3 days	Fri 12/07/19	Wed 17/07/19	EN-HE	3 days	Fri 12/07/19	
Removal BHN51						EN-HE,TE-MSC,TE-V!	2 days	Wed 17/07/19	Fri 19/07/19	EN-HE,TE-MSC,TE-V!	2 days	Wed 17/07/19	Fri 19/07/19	EN-HE,TE-MSC,TE-V!	2 days	Wed 17/07/19	
Close shielding						EN-HE	2 days	Fri 19/07/19	Tue 23/07/19	EN-HE	2 days	Fri 19/07/19	Tue 23/07/19	EN-HE	2 days	Fri 19/07/19	
Refurbishment BHN51						TE-MSC	5 wks	Mon 26/08/19	Fri 27/09/19	TE-MSC	5 wks	Mon 26/08/19	Fri 27/09/19	TE-MSC	5 wks	Mon 26/08/19	
Open shielding						EN-HE	3 days	Thu 10/10/19	Mon 14/10/19	EN-HE	3 days	Thu 10/10/19	Mon 14/10/19	EN-HE	3 days	Thu 10/10/19	
Reinstallation BHN51						EN-HE,TE-MSC,EN-S	2 days	Tue 15/10/19	Wed 16/10/19	EN-HE,TE-MSC,EN-S	2 days	Tue 15/10/19	Wed 16/10/19	EN-HE,TE-MSC,EN-S	2 days	Tue 15/10/19	
Close shielding						EN-HE	3 days	Thu 17/10/19	Mon 21/10/19	EN-HE	3 days	Thu 17/10/19	Mon 21/10/19	EN-HE	3 days	Thu 17/10/19	
Open days							2 days	Fri 13/09/19	Mon 16/09/19								
Magnet group 2B							91 days	Mon 16/09/19	Mon 03/02/20								
BHN18							49 days	Mon 16/09/19	Thu 21/11/19								
Open shielding (1 beam + 16 blocks)						EN-HE	4 days	Mon 16/09/19	Thu 19/09/19	EN-HE	4 days	Mon 16/09/19	Thu 19/09/19	EN-HE	4 days	Mon 16/09/19	
Removal BHN18						EN-HE,TE-MSC,TE-V!	1 day	Fri 20/09/19	Fri 20/09/19	EN-HE,TE-MSC,TE-V!	1 day	Fri 20/09/19	Fri 20/09/19	EN-HE,TE-MSC,TE-V!	1 day	Fri 20/09/19	
Close shielding						EN-HE	4 days	Mon 23/09/19	Thu 26/09/19	EN-HE	4 days	Mon 23/09/19	Thu 26/09/19	EN-HE	4 days	Mon 23/09/19	

BHN40 & QDN41



ELENA TL installation

Install supports LNE03 vertical 0332 - 0339	EN-MME	1 day	Thu 08/08/19	Thu 08/08/19	LNE03 vertical 0332 - 0339				
Install supports LNE03 0301 - 0327 (5)	EN-MME	1 day	Fri 13/09/19	Fri 13/09/19	Install supports LNE03 0301 - 0327 (5)				
Install supports LNE01 vertical 0175 - 0182	EN-MME	1 day	Fri 09/08/19	Fri 09/08/19	LNE01 vertical 0175 - 0182				
Install supports LNE01 0151-0159 (4)	EN-MME	1 day	Wed 18/09/19	Wed 18/09/19	Install supports LNE01 0151-0159 (4)				
Installation of electrostatics element + SEM + vac system									
Install ALPHA 0420 - 0434	TE-VSC,TE-ABT,EN-H	3 days	Tue 04/06/19	Thu 06/06/19					
Install ASACUSA 0501 - 0565	TE-VSC,TE-ABT,EN-H	7 days	Fri 07/06/19	Mon 17/06/19					
Install ASACUSA 0601 - 0662	TE-VSC,TE-ABT,EN-H	4 days	Thu 20/06/19	Tue 25/06/19					
Install BASE 0701 - 0749	TE-VSC,TE-ABT,EN-H	3 days	Wed 26/06/19	Fri 28/06/19					
Install LNE04 0401 - 0416	TE-VSC,TE-ABT,EN-H	1 day	Mon 01/07/19	Mon 01/07/19					
Install LNE01 0101 - 0145	TE-VSC,TE-ABT,EN-H	3 days	Tue 02/07/19	Thu 04/07/19					
Vacuum test LNE03-01 vertical assemblies	TE-VSC	13 days	Wed 14/08/19	Fri 30/08/19	Vacuum test LNE03-01 vertical assemblies				
Install LNE03 vertical 0332 0339 - ZDSV 0327	TE-VSC,TE-ABT,EN-H	1 day	Thu 12/09/19	Thu 12/09/19	Install LNE03 vertical 0332 0339 - ZDSV 0327				
Install LNE03 0301 - 0327	TE-VSC,TE-ABT,EN-H	1 day	Mon 16/09/19	Mon 16/09/19	Install LNE03 0301 - 0327				
Install LNE01 vertical 0175 0182- ZDSV 0170	TE-VSC,TE-ABT,EN-H	1 day	Tue 17/09/19	Tue 17/09/19	Install LNE01 vertical 0175 0182- ZDSV 0170				
Install LNE01 0151 - 0159	TE-VSC,TE-ABT,EN-H	1 day	Thu 19/09/19	Thu 19/09/19	Install LNE01 0151 - 0159				

Vacuum activities

▪ Vacuum work		97 days	Tue 13/08/19	Wed 08/01/20				
▪ Vac sector 3-4 (ATRAP2 + ALPHA)		TE-VSC	43 days	Thu 10/10/19	Mon 09/12/19	or 3-4 (ATRAP2 + ALPHA)	Installation of vacuum equipment	
	Installation of vacuum equipment	TE-VSC	2 days	Thu 10/10/19	Fri 11/10/19		Pump down + leak detection	
	Pump down + leak detection	TE-VSC	4 days	Mon 14/10/19	Thu 17/10/19			
	Bake-out preparation	TE-VSC	5 days	Fri 15/11/19	Thu 21/11/19		Bake-out preparation	
	Bake-out	TE-VSC	2 wks	Fri 22/11/19	Thu 05/12/19		Bake-out	
	Decablage	TE-VSC	2 days	Fri 06/12/19	Mon 09/12/19		Decablage	
▪ Vac sector 1-3 (LNE01 + ATRAP1)		TE-VSC	49 days	Fri 04/10/19	Wed 11/12/19	-3 (LNE01 + ATRAP1)	Installation of vacuum equipment	
	Installation of vacuum equipment	TE-VSC	2 days	Fri 04/10/19	Mon 07/10/19		Pump down + leak detection	
	Pump down + leak detection	TE-VSC	2 days	Tue 08/10/19	Wed 09/10/19			
	Bake-out preparation	TE-VSC	5 days	Fri 08/11/19	Thu 14/11/19		Bake-out preparation	
	Bake-out	TE-VSC	2 wks	Fri 15/11/19	Thu 28/11/19		Bake-out	
	Decablage	TE-VSC	2 days	Tue 10/12/19	Wed 11/12/19		Decablage	
▪ Vac sector 1		TE-VSC	54 days	Wed 11/09/19	Mon 25/11/19	or 1	Installation of vacuum equipment	
	Installation of vacuum equipment	TE-VSC	1 day	Wed 11/09/19	Wed 11/09/19		Pump down + leak detection	
	Pump down + leak detection	TE-VSC	2 days	Thu 12/09/19	Fri 13/09/19			
	Bake-out preparation	TE-VSC	5 days	Fri 01/11/19	Thu 07/11/19		Bake-out preparation	
	Bake-out	TE-VSC	2 wks	Fri 08/11/19	Thu 21/11/19		Bake-out	
	Decablage	TE-VSC	2 days	Fri 22/11/19	Mon 25/11/19		Decablage	
▪ Vac sector 0-1 (LNE00-LNE01)		TE-VSC	51 days	Mon 09/09/19	Mon 18/11/19	01	Installation of vacuum equipment	
	Installation of vacuum equipment	TE-VSC	2 days	Mon 09/09/19	Tue 10/09/19		Pump down + leak detection	
	Pump down + leak detection	TE-VSC	2 days	Wed 11/09/19	Thu 12/09/19			
	Bake-out preparation	TE-VSC	5 days	Fri 25/10/19	Thu 31/10/19		Bake-out preparation	
	Bake-out	TE-VSC	2 wks	Fri 01/11/19	Thu 14/11/19		Bake-out	
	Decablage	TE-VSC	2 days	Fri 15/11/19	Mon 18/11/19		Decablage	
▪ Vac sector 7 (BASE)		TE-VSC	48 days	Mon 16/09/19	Wed 20/11/19	7 (BASE)	Installation of vacuum equipment	
	Installation of vacuum equipment	TE-VSC	1 day	Mon 16/09/19	Mon 16/09/19		Pump down + leak detection	
	Pump down + leak detection	TE-VSC	2 days	Tue 17/09/19	Wed 18/09/19			
	Bake-out preparation	TE-VSC	5 days	Fri 18/10/19	Thu 24/10/19		Bake-out preparation	
	Bake-out	TE-VSC	2 wks	Fri 25/10/19	Thu 07/11/19		Bake-out	
	Decablage	TE-VSC	2 days	Tue 19/11/19	Wed 20/11/19		Decablage	
▪ Vac sector 6-5 (LNE06)		TE-VSC	91 days	Mon 19/08/19	Mon 06/01/20		Installation of vacuum equipment	
	Installation of vacuum equipment	TE-VSC	2 days	Mon 19/08/19	Tue 20/08/19		Pump down + leak detection	
	Pump down + leak detection	TE-VSC	2 days	Wed 04/09/19	Thu 05/09/19			
	Bake-out preparation	TE-VSC	5 days	Fri 29/11/19	Thu 05/12/19		Bake-out preparation	
	Bake-out	TE-VSC	2 wks	Fri 06/12/19	Thu 19/12/19		Bake-out	
	Decablage	TE-VSC	2 days	Fri 20/12/19	Mon 06/01/20		Decab	
▪ Vac sector 5 (LNE05)		TE-VSC	97 days	Tue 13/08/19	Wed 08/01/20		Installation of vacuum equipment	
	Installation of vacuum equipment	TE-VSC	2 days	Tue 13/08/19	Wed 14/08/19		Pump down + leak detection	
	Pump down + leak detection	TE-VSC	2 days	Thu 15/08/19	Fri 16/08/19			
	Bake-out preparation	TE-VSC	5 days	Fri 22/11/19	Thu 28/11/19		Bake-out preparation	
	Bake-out	TE-VSC	2 wks	Fri 29/11/19	Thu 12/12/19		Bake-out	

ASACUSA LNE05



ASACUSA LNE06



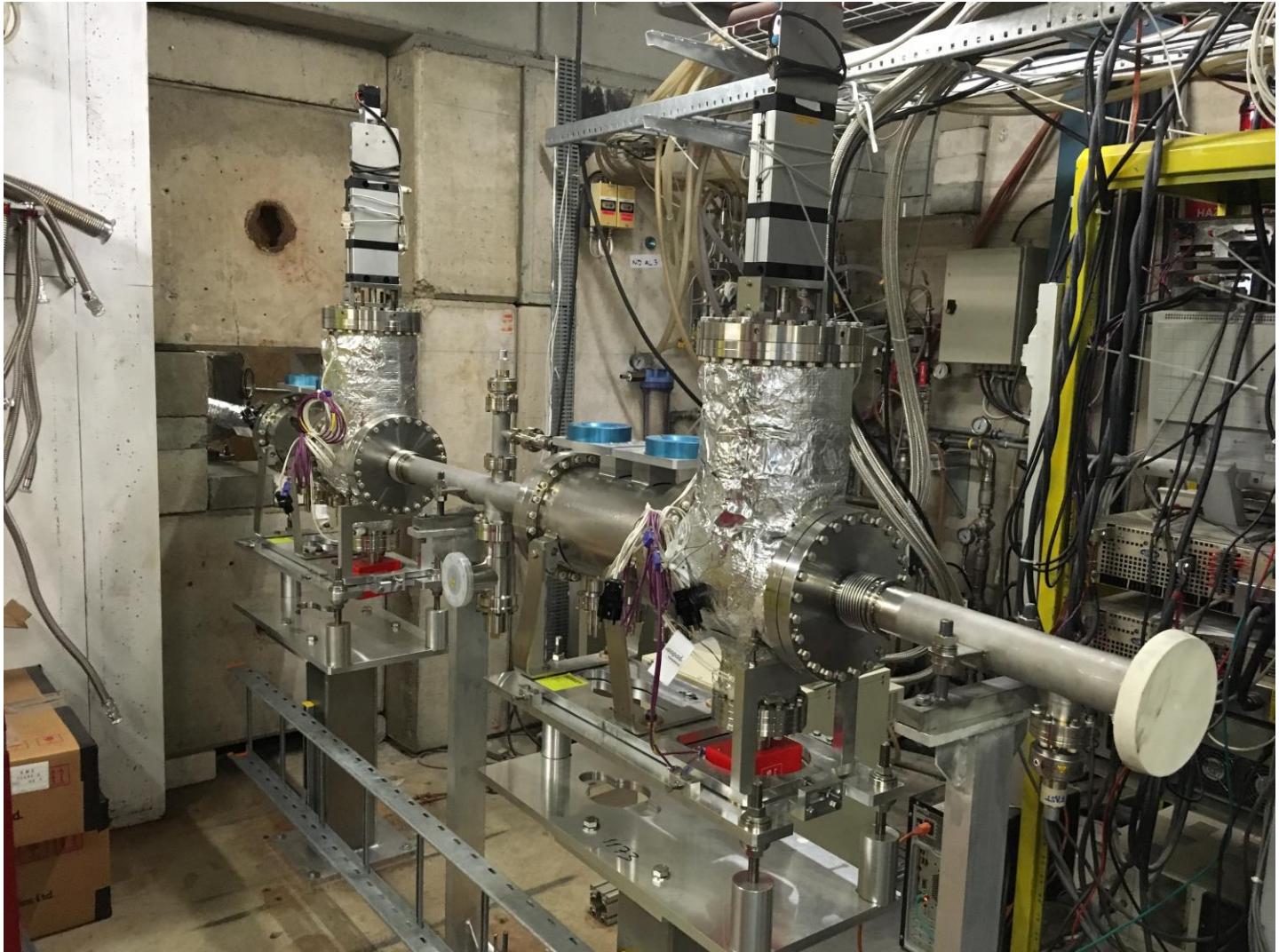
ASACUSA LNE06

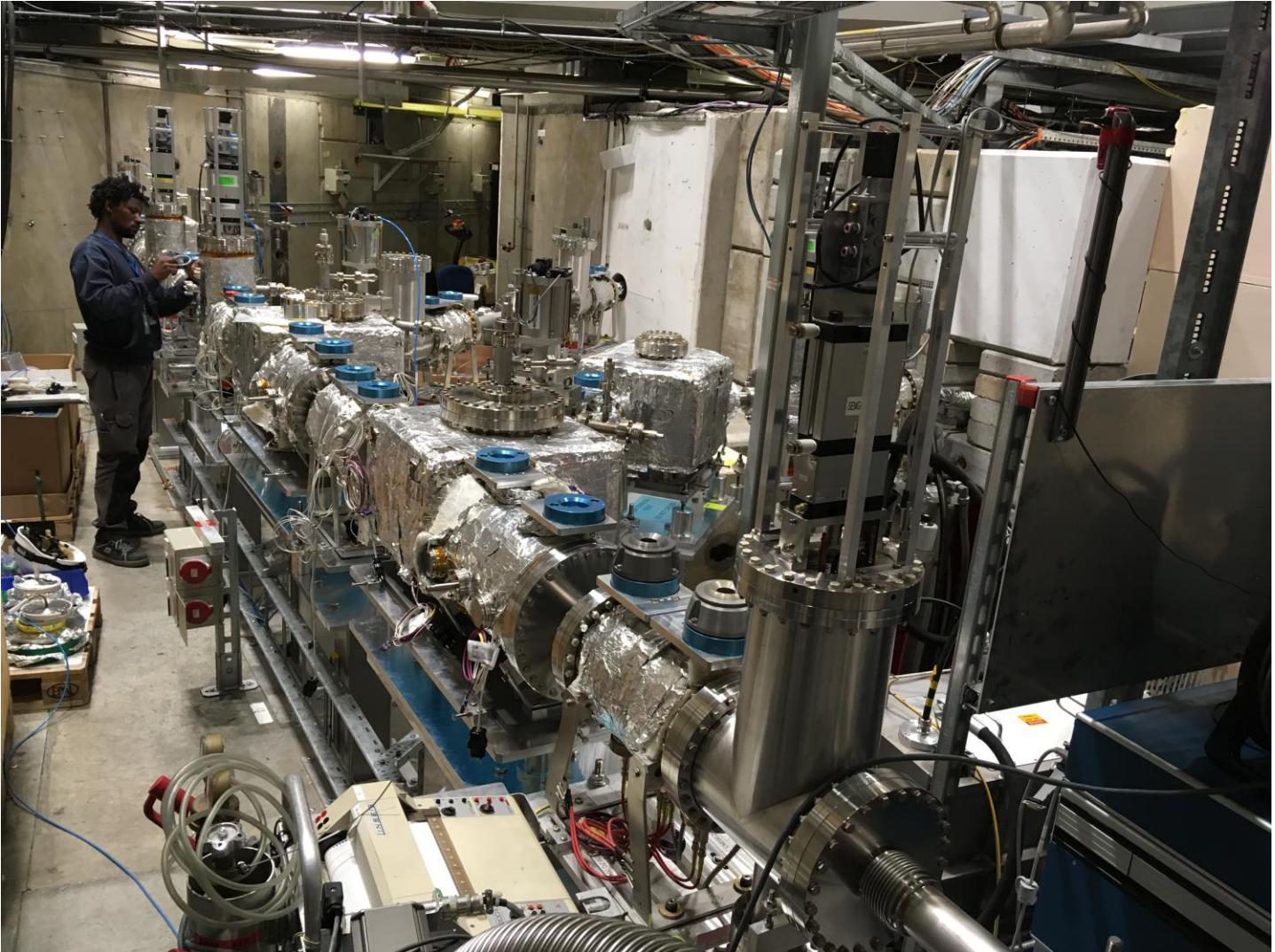


ALPHA LNE04



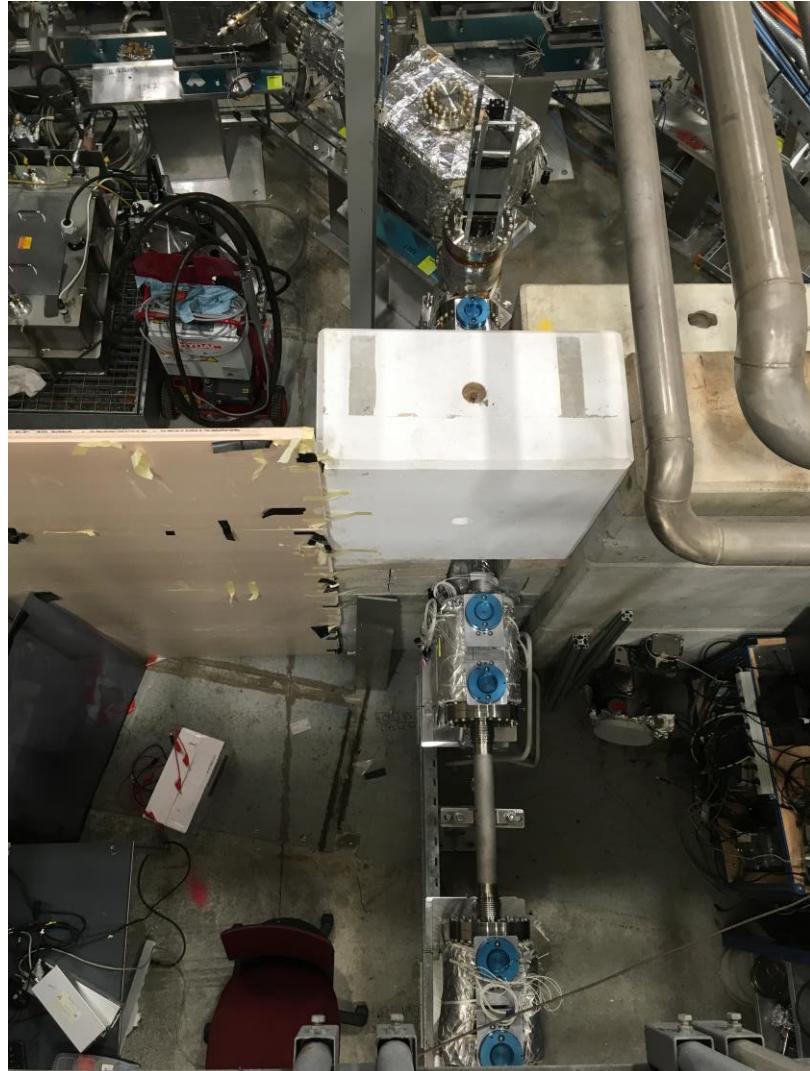
ALPHA LNE04



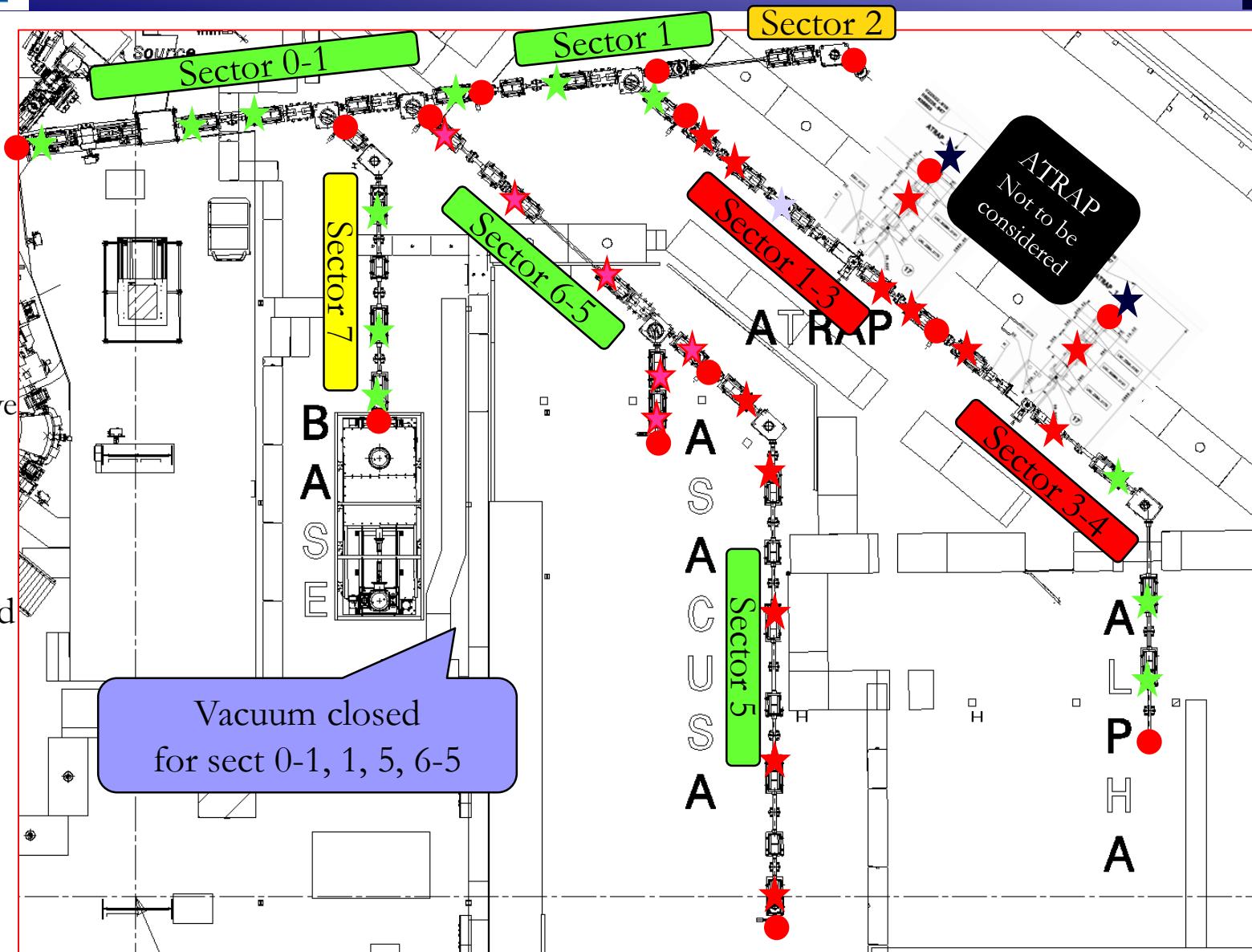




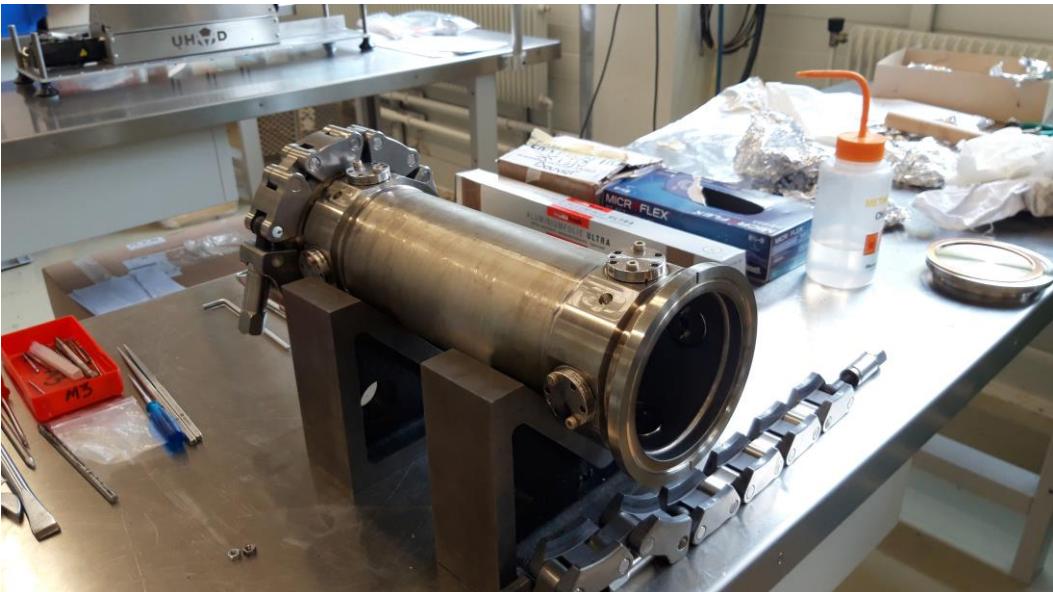
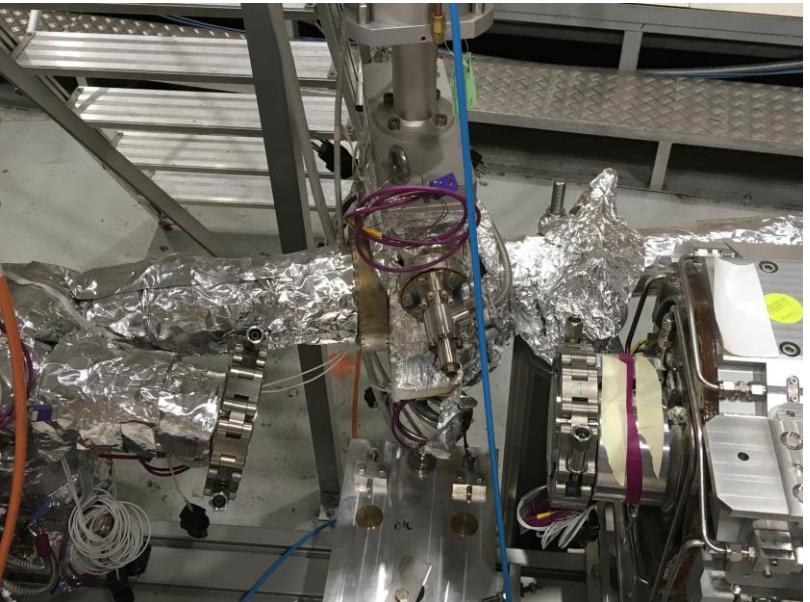
BASE LNE07



Vacuum sectors



ELENA ring tune kicker



Stochastic cooling re-install

