

#### **AD FACILITY**



## Technical Coordination Meeting

YETS preparation



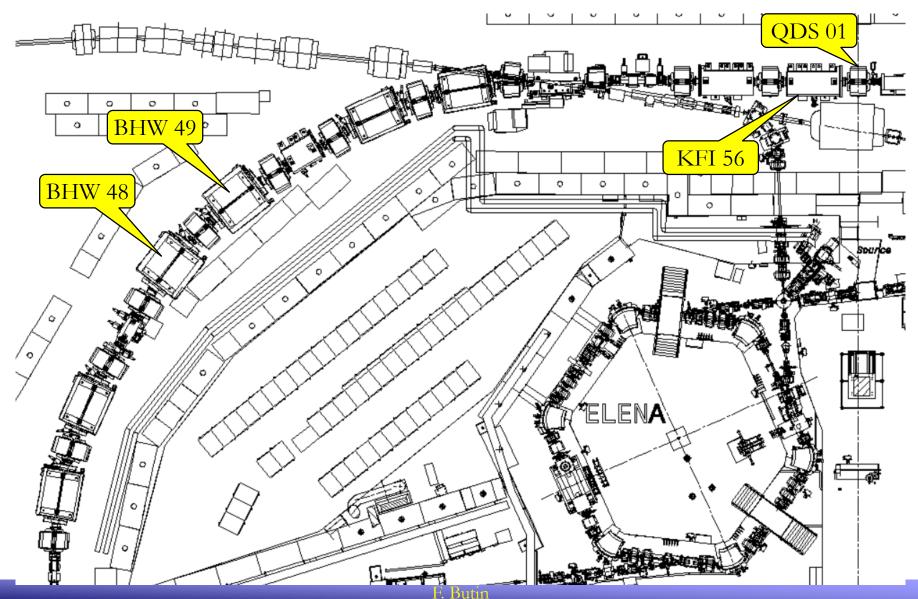
# ANTIMATTER FACTORY





### AD works: sector 1 A

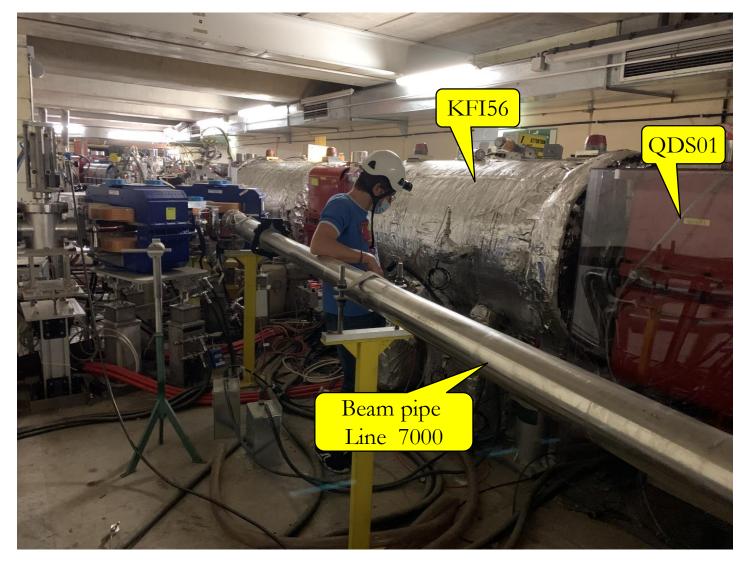






## AD KFI56 kicker repair







# AD KFI repair



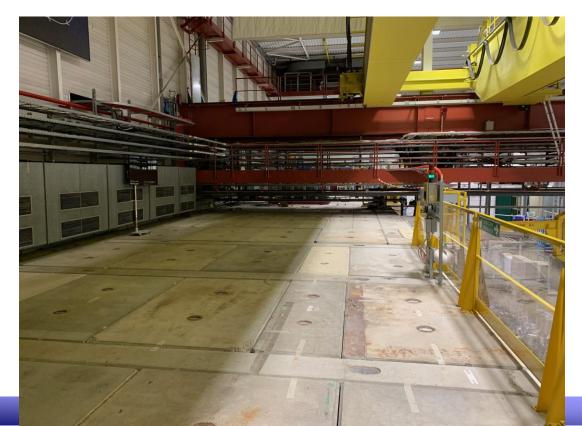
						Nov '21		Dec '21		Ja	ın '22		F	eb '22		I	Mar '22			Apr '2
ask Name	▼ Duratic ▼	Start -	Finish 🔻	Groups 🔻	F 44	45   46   4	17   48	49   50   5	51   52	1   2	2 3	4	5   6	7	8	9   10	11	12   13	3   14	15
₄ KFI repair	67 days	Mon 15.11.21	Wed 02.03.22		FI rep	air www.			anii anii anii a			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		<u> </u>	<del>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</del>	7				
KFI investigations	1 wk	Mon 15.11.21	Mon 22.11.21	SY-ABT			KFI inve	stigations		(										
KFI measurement	1 day	Mon 22.11.21	Tue 23.11.21	BE-GM		1	KF) me	asurement			TE	3C	- :							
Shielding opening	2 days	Mon 22.11.21	Wed 24.11.21	EN-HE			Shieldi	ng opening			_									
KFI56 extraction	1 day	Wed 24.11.21	Thu 25.11.21	EN-HE			KF 56	extraction												
KFI56 repair	6 wks	Thu 25.11.21	Thu 20.01.22	SY-ABT			:		: :	- :	K	FI56 ı	epair							
KFI56 re-installation	1 day	Thu 20.01.22	Fri 21.01.22	EN-HE					1	· · · · · ·	11	KFI56	re-inst	allation	i					
KFI alignment	1 day	Fri 21.01.22	Mon 24.01.22	BE-GM								KFI	alignme	ent						
Sector 1A closure and leak detection	2 days	Mon 24.01.22	Wed 26.01.22	TE-VSC	-	Du	ratio	on rec		4		■ Se	ctor 1A	closur	e and l	eak de	tection	· [		
Shielding closing	2 days	Wed 26.01.22	Fri 28.01.22	EN-HE	-		lauc	)11 TCC	iucc	<u>u</u> ,		■ S	hieldin	g closir	1g					
Bake out install sect 1A	1 wk	Mon 07.02.22	Fri 11.02.22	TE-VSC	- :								<u>ا</u>	Bake	out in	stall se	ct 1A			
Bake out sect 1A	2.5 wks	Mon 14.02.22	Wed 02.03.22	TE-VSC	-							٦	<b>Z</b> \			Bake	out se	ct 1A		
▶ Magnets Sect 1A	50 days	Mon 15.11.21	Fri 04.02.22			-	:		······································	:	:	· \	<u> </u>							
▶ AD Sect 3	54.5 days	Mon 29.11.21	Fri 25.02.22		-							1	0							
▶ ELENA works	84 days	Mon 15.11.21	Thu 24.03.22				-		: :	:	:	: :	13/	\ <u> </u>						
△ Machines restart 2022	38.5 days	Wed 16.02.22	Mon 11.04.22							N	/lachine	es res	tar	) ( 27//	,,,,,,,,,,,				,,,,,,,,,,,	☞
ELENA deconsiniation - unlock out	0.5 days	Wed 16.02.22	Wed 16.02.22		-								\ <del>\</del>	E	LENA d	econsi	niation	- unloc	k out	
ELENA acces and DSO test	1 day	Thu 17.02.22	Thu 17.02.22	EN-AA	-								1	$\frac{S}{L}$	LENA a	acces a	nd DSC	) test		
Commissioning ELENA + LNE51 with H-	3 wks	Fri 18.02.22	Thu 10.03.22	BE-ABP;BE-O	-								\   	5			Comm	issionii	ng ELEN	IA + LI
AD deconsignation - unlock out	0.5 days	Fri 18.02.22	Fri 18.02.22	TE-EPC										Par	D dec	consign	ation -	unlock	out	
AD IST + HW tests	3 wks	Fri 18.02.22	Fri 11.03.22											13	7		AD IST	+ HW	tests	
AD target + ring acces and DSO tests	1 day	Fri 11.03.22	Mon 14.03.22	EN-AA											/	1	AD t	arget +	ring ac	ces aı
Protons on AD target 2022	0 days	Mon 14.03.22	Mon 14.03.22	BE-OP	-								Protons	on AE	) target	t 2022	<b>4</b> 14.	03		
AD target commissioning with beam	1 day	Mon 14.03.22	Mon 14.03.22	BE-OP	-												a AD	target (	commi	ssionii
AD ring commissioning with beam	3 wks	Tue 15.03.22	Mon 04.04.22	BE-OP															AD	ring o
ELENA commissioning with beam	1 wk	Tue 05.04.22	Mon 11.04.22	BE-OP	1															ELEI
4 AD/ELENA run 2022	116 days	Mon 11.04.22	Wed 28.09.22		T												AD/ELE	NA run	2022	<b>0</b> ////////
Start of physics 2022	0 days	Mon 11.04.22	Mon 11.04.22	BE-OP							:					S	tart of	physics	2022	<b>• 11.</b>



## AD KFI repair in 193



- If KFI is extracted for repair, it will stay in 193 to limit transport time and risks
- Will reduce space for shielding blocks storage





AD/ELENA run 2022

Start of physics 2022

## AD Magnet BHW49

116 days Mon 11.04.22 Wed 28.09.22

Mon 11.04.22 Mon 11.04.22 BE-OP



AD/ELENA run 2022 -

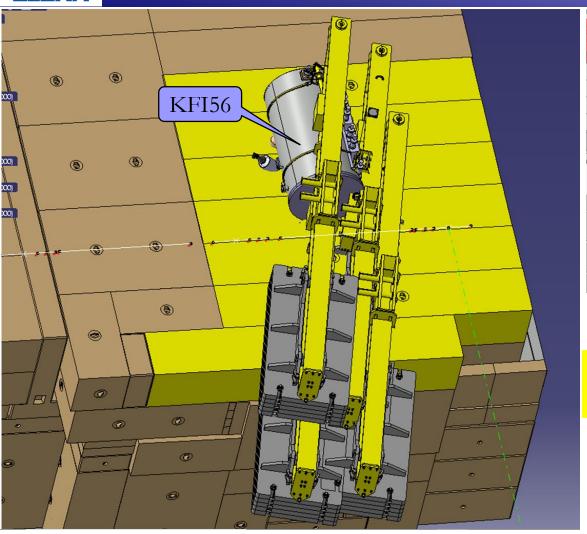
Start of physics 2022 • 11.0

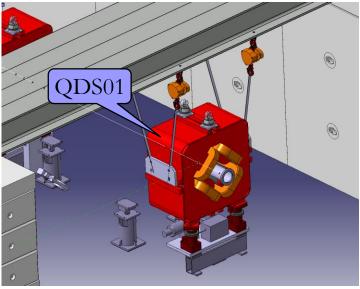
<b>ELENA</b>																	_/		
						Nov '21		Dec '21		Jan '	'22		Feb '	22		Mar '2	22		Apr '
sk Name	Duratic →	Start •	Finish 🔻	Groups 🔻	F 44 4	15   46   4	7 48	3   49   50   5	1 52	1   2	3   4	5	6	7   8	9 1	10   11	12	13   14	4   15
₄ BHW49	67.5 days	Mon 15.11.21			BHW4		min		minandin			aii aaaa		,,,,,,,,,,,,,,,,,	<del> </del>			T	
Shielding opening for BHW49	3 days	Mon 15.11.21	Wed 17.11.21	EN-HE		Shie	lding	opening for B	HW49										
Cut vac chamber BHW48	3 days	Thu 18.11.21	Mon 22.11.21	EN-MME			Cut va	c chamber BH	W48										
Extract BHW49	1 day	Tue 23.11.21	Tue 23.11.21	EN-HE	1	i i	Extra	ct BHW49	1 1	: :	i	i	1 1	1 1	i	:	1 1	1	: :
Shielding close partially	2 days	Wed 24.11.21	Thu 25.11.21	EN-HE			Shie	lding close pa	rtially										
BHW49 refurbish	7 wks	Wed 24.11.21	Tue 25.01.22	TE-MSC				880088888888888888888888888				BHW4	9 refurl	oish					
Open shielding BHW49	2 days	Wed 26.01.22	Thu 27.01.22	EN-HE								Oper	shield	ng BHW	49				
Re-install BHW49	1 day	Fri 28.01.22	Fri 28.01.22	EN-HE							ı	Re-i	nstall B	HW49					
BHW49 Alignment	1 day	Mon 31.01.22	Mon 31.01.22	BE-GM								Bŀ	IW49 A	lignmen	t				
Weld vac chamber BHW49	2 days	Tue 01.02.22	Wed 02.02.22	EN-MME								١	Veld va	c chamb	er BH\	N49			
Sector 1A closure and leak detection	2 days	Thu 03.02.22	Fri 04.02.22	TE-VSC			!-	**************			<u> </u>		Sector	1A closu	re and	l leak d	letectio	n	
Close shielding BHW49	2 days	Thu 03.02.22	Fri 04.02.22	EN-HE				On C	P!		1		Close s	hielding	BHW4	19			
Bake out install sect 1A	1 wk	Mon 07.02.22	Fri 11.02.22	TE-VSC			т			1		_	Ba	ke out i	nstall	sect 1A	V i		
Bake out sect 1A	2.5 wks	Mon 14.02.22	Wed 02.03.22	TE-VSC		لـــّـــ	1	Delaye	a til	l					Bak	e out s	ect 1A		
▶ BHW48	34 days	Fri 26.11.21	Wed 26.01.24				1	next $Y$	ETS	S	-								
▶ AD Sect 3	54.5 days	Mon 29.11.21	Fri 25.02.22				: 1	1 1 1	: 1:				[]						
▶ ELENA works	84 days	Mon 15.11.21	Thu 24.03.22				-						Ca	\		•			
Machines restart 2022	38.5 days	Wed 16.02.22	Mon 11.04.22							Ma	chines r	estart	20	·					7777D
ELENA deconsiniation - unlock out	0.5 days	Wed 16.02.22	Wed 16.02.22										17'A	<b>)</b> (	decon	siniatio	n - unl	ock out	:
ELENA acces and DSO test	1 day	Thu 17.02.22	Thu 17.02.22	EN-AA									\ <u>\</u> E	ENA	acces	and DS	SO test		
Commissioning ELENA + LNE51 with H-	3 wks	Fri 18.02.22	Thu 10.03.22	BE-ABP;BE-O									له	7		Com	missior	ning ELI	ENA + L
AD deconsignation - unlock out	0.5 days	Fri 18.02.22	Fri 18.02.22	TE-EPC										<b>√</b> ⁄o de	consi	gnation	ı - unlo	ck out	
AD IST + HW tests	3 wks	Fri 18.02.22	Fri 11.03.22												  !	AD IS	ST + HV	V tests	
AD target + ring acces and DSO tests	1 day	Fri 11.03.22	Mon 14.03.22	EN-AA												■ AD	target	+ ring	acces a
Protons on AD target 2022	0 days	Mon 14.03.22	Mon 14.03.22	BE-OP								Pro	tons on	AD targe	et 202	2 🔷 14	1.03		
AD target commissioning with beam	1 day	Mon 14.03.22	Mon 14.03.22	BE-OP												ıA 🛚	D targe	t comn	nission
AD ring commissioning with beam	3 wks	Tue 15.03.22	Mon 04.04.22	BE-OP														A	D ring
ELENA commissioning with beam	1 wk	Tue 05.04.22	Mon 11.04.22	BE-OP	1														ELE
							;								.}				



## AD quad magnet QDS01







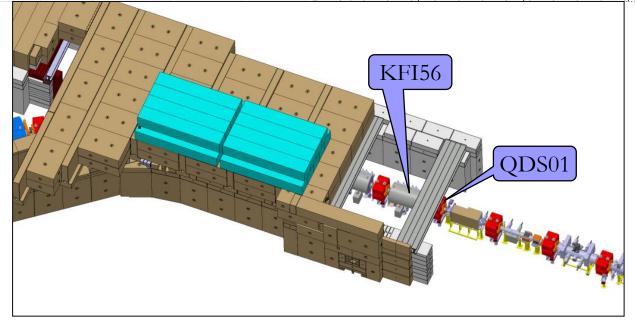
Same shield blocks to be opened for KFI56 or QDS01 extraction



## AD QDS01 magnet



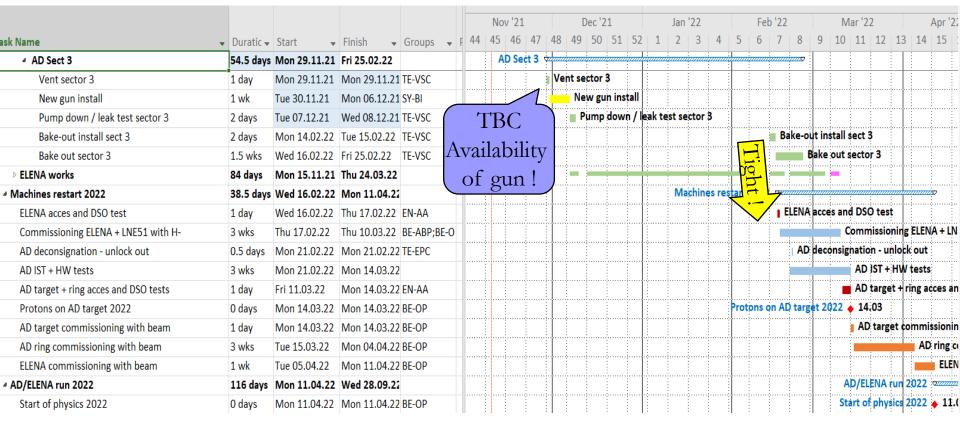
					Nov '21																
									Dec '21			Jan '22				Feb '22				Mar	
Duratic 🕶	Start ▼	Finish 🔻	Groups 🔻	F	44 45	46	5 47	48	49	50	51   5	2 1	2	3	4	5	6	7	8	9   1	0   1
48.5 days	Tue 16.11.21	Fri 04.02.22			QDS0	l 9222	,,,,,,,,,,,,	ininini		,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	dininininininininininininininininininin	,,,,,,,,,,,,	,,,,,,,,,,	,,,,,,,,,,,	2220			:	i	
0.5 days	Tue 16.11.21	Tue 16.11.21	TE-VSC			۱۱	/ent li	ne 7	000								i		:	i	i
0.5 days	Tue 16.11.21	Tue 16.11.21	TE-VSC				Remo	ve be	eam p	ipe se	ection										
2 days	Wed 17.11.21	Thu 18.11.21	EN-HE	П			Extra	ction	1 tool	ng in	stall										
1 day	Thu 25.11.21	Fri 26.11.21	EN-HE				I	Extra	act QI	)S01							:				
7 wks	Fri 26.11.21	Fri 28.01.22	TE-MSC												R	efur	bish (	QDS0	1		
1 day	Fri 28.01.22	Mon 31.01.22	EN-HE													Re-i	nsta	I QDS	S01		- 1
1 day	Mon 31.01.22	Tue 01.02.22	BE-GM													QD	S01 a	lignr	nent		
2 days	Tue 01.02.22	Thu 03.02.22	EN-HE													■ Q	DS01	Shie	lding	closin	g
1 day	Thu 03.02.22	Fri 04.02.22	TE-VSC													<b>∥</b> P	ump	dow	n line	7000	
	48.5 days 0.5 days 0.5 days 2 days 1 day 7 wks 1 day 1 day 2 days	48.5 days Tue 16.11.21 0.5 days Tue 16.11.21 0.5 days Tue 16.11.21 2 days Wed 17.11.21 1 day Thu 25.11.21 7 wks Fri 26.11.21 1 day Fri 28.01.22 1 day Mon 31.01.22 2 days Tue 01.02.22	48.5 days         Tue 16.11.21         Fri 04.02.22           0.5 days         Tue 16.11.21         Tue 16.11.21           0.5 days         Tue 16.11.21         Tue 16.11.21           2 days         Wed 17.11.21         Thu 18.11.21           1 day         Thu 25.11.21         Fri 26.11.21           7 wks         Fri 26.11.21         Fri 28.01.22           1 day         Fri 28.01.22         Mon 31.01.22           1 day         Mon 31.01.22         Tue 01.02.22           2 days         Tue 01.02.22         Thu 03.02.22	48.5 days         Tue 16.11.21         Fri 04.02.22           0.5 days         Tue 16.11.21         Tue 16.11.21         TE-VSC           0.5 days         Tue 16.11.21         Tue 16.11.21         TE-VSC           2 days         Wed 17.11.21         Thu 18.11.21         EN-HE           1 day         Thu 25.11.21         Fri 26.11.21         EN-HE           7 wks         Fri 26.11.21         Fri 28.01.22         TE-MSC           1 day         Fri 28.01.22         Mon 31.01.22         EN-HE           1 day         Mon 31.01.22         Tue 01.02.22         BE-GM           2 days         Tue 01.02.22         Thu 03.02.22         EN-HE	48.5 days         Tue 16.11.21         Fri 04.02.22           0.5 days         Tue 16.11.21         Tue 16.11.21         TE-VSC           0.5 days         Tue 16.11.21         Tue 16.11.21         TE-VSC           2 days         Wed 17.11.21         Thu 18.11.21         EN-HE           1 day         Thu 25.11.21         Fri 26.11.21         EN-HE           7 wks         Fri 26.11.21         Fri 28.01.22         TE-MSC           1 day         Fri 28.01.22         Mon 31.01.22         EN-HE           1 day         Mon 31.01.22         Tue 01.02.22         BE-GM           2 days         Tue 01.02.22         Thu 03.02.22         EN-HE	Duratic → Start → Finish → Groups → F 44 45         48.5 days       Tue 16.11.21       Fri 04.02.22       QDS01         0.5 days       Tue 16.11.21       Tue 16.11.21       TE-VSC         0.5 days       Tue 16.11.21       Tue 16.11.21       TE-VSC         2 days       Wed 17.11.21       Thu 18.11.21       EN-HE         1 day       Thu 25.11.21       Fri 26.11.21       EN-HE         7 wks       Fri 26.11.21       Fri 28.01.22       TE-MSC         1 day       Fri 28.01.22       Mon 31.01.22       EN-HE         1 day       Mon 31.01.22       Tue 01.02.22       BE-GM         2 days       Tue 01.02.22       Thu 03.02.22       EN-HE	Duratic → Start       → Finish       → Groups       → F 44 45 46         48.5 days       Tue 16.11.21       Fri 04.02.22       QDS01         0.5 days       Tue 16.11.21       Tue 16.11.21       TE-VSC       I V         0.5 days       Tue 16.11.21       Tue 16.11.21       TE-VSC       I V         2 days       Wed 17.11.21       Thu 18.11.21       EN-HE       I         1 day       Thu 25.11.21       Fri 26.11.21       EN-HE       I         7 wks       Fri 26.11.21       Fri 28.01.22       TE-MSC       I         1 day       Fri 28.01.22       Mon 31.01.22 EN-HE       I         1 day       Mon 31.01.22       Tue 01.02.22       BE-GM         2 days       Tue 01.02.22       Thu 03.02.22       EN-HE	Duratic → Start       → Finish       → Groups       → F 44 45 46 47         48.5 days       Tue 16.11.21       Fri 04.02.22       QDS01         0.5 days       Tue 16.11.21       Tue 16.11.21       TE-VSC         Vent li         0.5 days       Tue 16.11.21       Tue 16.11.21       TE-VSC         Remove         2 days       Wed 17.11.21       Thu 18.11.21       EN-HE         Extra         1 day       Thu 25.11.21       Fri 26.11.21       EN-HE         Extra         7 wks       Fri 26.11.21       Fri 28.01.22       TE-MSC         Extra         1 day       Fri 28.01.22       Mon 31.01.22       EN-HE         Extra         1 day       Mon 31.01.22       Tue 01.02.22       BE-GM         Extra         2 days       Tue 01.02.22       Thu 03.02.22       EN-HE         Extra	Duratic → Start       → Finish       → Groups       → F 44 45 46 47 48         48.5 days       Tue 16.11.21       Fri 04.02.22       QDS01         0.5 days       Tue 16.11.21       Tue 16.11.21       TE-VSC         Vent line 7         0.5 days       Tue 16.11.21       Tue 16.11.21       TE-VSC         Remove be         2 days       Wed 17.11.21       Thu 18.11.21       EN-HE         Extraction         1 day       Thu 25.11.21       Fri 26.11.21       EN-HE         Extraction         1 day       Fri 28.01.22       Mon 31.01.22       EN-HE         Image: Company of the	Duratic → Start       → Finish       → Groups       → F 44 45 46 47 48 49         48.5 days       Tue 16.11.21       Fri 04.02.22       ODS01         0.5 days       Tue 16.11.21       Tue 16.11.21       TE-VSC         Vent line       7000         0.5 days       Tue 16.11.21       Tue 16.11.21       TE-VSC         Remove   beam p         2 days       Wed 17.11.21       Thu 18.11.21       EN-HE         Extraction tool         1 day       Thu 25.11.21       Fri 26.11.21       EN-HE         Extract QI         7 wks       Fri 26.11.21       Fri 28.01.22       TE-MSC         Image: Text of the point	Duratic → Start       → Finish       → Groups       → F 44 45 46 47 48 49 50         48.5 days       Tue 16.11.21       Fri 04.02.22       ODS01         0.5 days       Tue 16.11.21       Tue 16.11.21       TE-VSC       I Vent line 7000         0.5 days       Tue 16.11.21       Tue 16.11.21       TE-VSC       I Remove beam pipe some pipe s	Duratic → Start → Finish → Groups → F 44 45 46 47 48 49 50 51 5           48.5 days         Tue 16.11.21         Fri 04.02.22         QDS01         QDS01<	Duratic → Start → Finish → Groups → F 44 45 46 47 48 49 50 51 52 1           48.5 days         Tue 16.11.21         Fri 04.02.22         QDS01         QDS	Duratic → Start         → Finish         → Groups         → F         44         45         46         47         48         49         50         51         52         1         2           48.5 days         Tue 16.11.21         Fri 04.02.22         QDSQ1         QDSQ1	Duratic → Start         → Finish         → Groups         → F 44 45 46 47 48 49 50 51 52 1 2 3           48.5 days         Tue 16.11.21         Fri 04.02.22         ODS01           0.5 days         Tue 16.11.21         Tue 16.11.21         Tue 16.11.21           0.5 days         Tue 16.11.21         Tue 16.11.21         Tue 16.11.21           2 days         Wed 17.11.21         Thu 18.11.21         EN-HE         ■ Extraction tooling install           1 day         Thu 25.11.21         Fri 26.11.21         EN-HE         ■ Extract QDS01           7 wks         Fri 26.11.21         Fri 28.01.22         TE-MSC           1 day         Fri 28.01.22         Mon 31.01.22 EN-HE         ■ Extract QDS01           1 day         Mon 31.01.22         Tue 01.02.22         BE-GM           2 days         Tue 01.02.22         Thu 03.02.22         EN-HE	Duratic → Start       → Finish       → Groups       → F 44 45 46 47 48 49 50 51 52 1 2 3 4         48.5 days       Tue 16.11.21       Fri 04.02.22       ODS01         0.5 days       Tue 16.11.21       Tue 16.11.21 TE-VSC       I Vent line 7000         0.5 days       Tue 16.11.21       Tue 16.11.21 TE-VSC       I Remove beam pipe section         2 days       Wed 17.11.21       Thu 18.11.21 EN-HE       ■ Extraction tooling install         1 day       Thu 25.11.21       Fri 26.11.21 EN-HE       ■ Extract QDS01         7 wks       Fri 26.11.21       Fri 28.01.22 TE-MSC       ■ Extract QDS01         1 day       Mon 31.01.22 EN-HE       ■ Company of the pipe section         1 day       Fri 28.01.22 Mon 31.01.22 EN-HE       ■ Company of the pipe section         2 days       Tue 01.02.22 Thu 03.02.22 EN-HE       ■ Company of the pipe section	Duratic → Start         → Finish         → Groups         → F 44 45 46 47 48 49 50 51 52 1 2 3 4 5           48.5 days         Tue 16.11.21         Fri 04.02.22         ODS01           0.5 days         Tue 16.11.21         Tue 16.11.21 TE-VSC           Vent line 7000           0.5 days         Tue 16.11.21 Tue 16.11.21 TE-VSC           Remove beam pipe section           2 days         Wed 17.11.21 Thu 18.11.21 EN-HE           Extraction tooling install           1 day         Thu 25.11.21 Fri 26.11.21 EN-HE           Extract QDS01           7 wks         Fri 26.11.21 Fri 28.01.22 TE-MSC           Refur           1 day         Mon 31.01.22 EN-HE           QD           2 days         Tue 01.02.22 BE-GM           QD           2 days         Tue 01.02.22 Thu 03.02.22 EN-HE           QD	Duratic → Start         → Finish         → Groups         → F         44         45         46         47         48         49         50         51         52         1         2         3         4         5         6           48.5 days         Tue 16.11.21         Fri 04.02.22         DUS01         DUS01 <t< th=""><th>Duratic → Start         Finish → Groups → F 44 45 46 47 48 49 50 51 52 1 2 3 4 5 6 7           48.5 days Tue 16.11.21         Fri 04.02.22           0.5 days Tue 16.11.21         Tue 16.11.21 TE-VSC           0.5 days Tue 16.11.21         Tue 16.11.21 TE-VSC           2 days Wed 17.11.21         Thu 18.11.21 EN-HE           1 day         Thu 25.11.21           Fri 26.11.21         Fri 26.11.21 EN-HE           1 day         Fri 28.01.22           Mon 31.01.22 EN-HE         Extract QDS01           1 day         Mon 31.01.22 EN-HE           1 day         Tue 01.02.22 BE-GM           2 days         Tue 01.02.22 EN-HE           2 days         Tue 01.02.22 EN-HE           2 days         Tue 01.02.22 EN-HE</th><th>Duratic ▼ Start       ▼ Finish       ▼ Groups       ▼ F 44 45 46 47 48 49 50 51 52 1 2 3 4 5 6 7 8         48.5 days       Tue 16.11.21       Fri 04.02.22       QDS01         0.5 days       Tue 16.11.21       Tue 16.11.21 TE-VSC         Vent line 7000         0.5 days       Tue 16.11.21 Tue 16.11.21 TE-VSC         Remove beam pipe section         2 days       Wed 17.11.21 Thu 18.11.21 EN-HE         Extraction tooling install         1 day       Thu 25.11.21 Fri 26.11.21 EN-HE         Extract QDS01         7 wks       Fri 26.11.21 Fri 28.01.22 TE-MSC         Refurbish QDS01         1 day       Mon 31.01.22 Tue 01.02.22 BE-GM         QDS01 alignment         2 days       Tue 01.02.22 Thu 03.02.22 EN-HE         QDS01 Shielding</th><th>Duratic → Start         → Finish         → Groups         → F         44         45         46         47         48         49         50         51         52         1         2         3         4         5         6         7         8         9         1           48.5 days         Tue 16.11.21         Fri 04.02.22         Image: Company of the company</th></t<>	Duratic → Start         Finish → Groups → F 44 45 46 47 48 49 50 51 52 1 2 3 4 5 6 7           48.5 days Tue 16.11.21         Fri 04.02.22           0.5 days Tue 16.11.21         Tue 16.11.21 TE-VSC           0.5 days Tue 16.11.21         Tue 16.11.21 TE-VSC           2 days Wed 17.11.21         Thu 18.11.21 EN-HE           1 day         Thu 25.11.21           Fri 26.11.21         Fri 26.11.21 EN-HE           1 day         Fri 28.01.22           Mon 31.01.22 EN-HE         Extract QDS01           1 day         Mon 31.01.22 EN-HE           1 day         Tue 01.02.22 BE-GM           2 days         Tue 01.02.22 EN-HE           2 days         Tue 01.02.22 EN-HE           2 days         Tue 01.02.22 EN-HE	Duratic ▼ Start       ▼ Finish       ▼ Groups       ▼ F 44 45 46 47 48 49 50 51 52 1 2 3 4 5 6 7 8         48.5 days       Tue 16.11.21       Fri 04.02.22       QDS01         0.5 days       Tue 16.11.21       Tue 16.11.21 TE-VSC         Vent line 7000         0.5 days       Tue 16.11.21 Tue 16.11.21 TE-VSC         Remove beam pipe section         2 days       Wed 17.11.21 Thu 18.11.21 EN-HE         Extraction tooling install         1 day       Thu 25.11.21 Fri 26.11.21 EN-HE         Extract QDS01         7 wks       Fri 26.11.21 Fri 28.01.22 TE-MSC         Refurbish QDS01         1 day       Mon 31.01.22 Tue 01.02.22 BE-GM         QDS01 alignment         2 days       Tue 01.02.22 Thu 03.02.22 EN-HE         QDS01 Shielding	Duratic → Start         → Finish         → Groups         → F         44         45         46         47         48         49         50         51         52         1         2         3         4         5         6         7         8         9         1           48.5 days         Tue 16.11.21         Fri 04.02.22         Image: Company of the company





### Sect 3: AD e-cooler

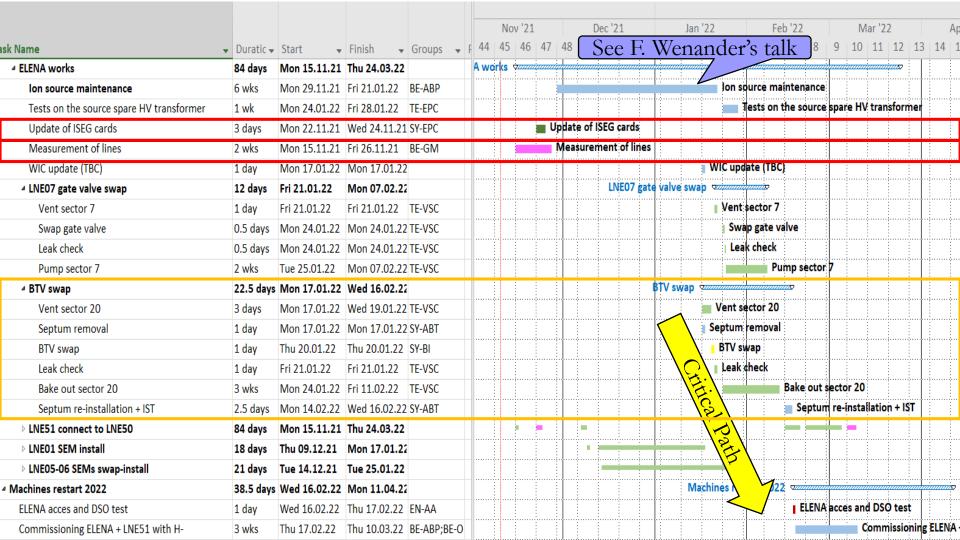






### **ELENA** works







### **ELENA SEM's**



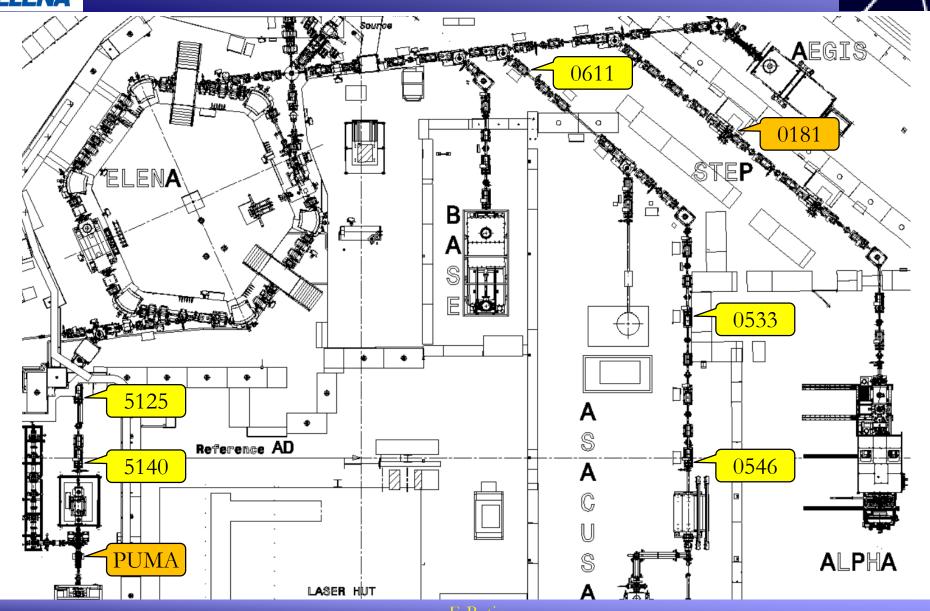
- 6 SEM units should be installed during YETS:
  - □ 2 for PUMA LNE51 transfer line (5125 and 5140) − Vac acceptance test to confirm repaired units are adequate
  - □ 1 for STEP LNE01 transfer line (0181 fixed) to be produced/assembled/tested
  - □ 3 for ASACUSA LNE05-06 transfer lines (0533, 0546, 0611) to be produced/assembled/tested

- 1 SEM unit can be installed (shortly) after YETS:
  - □ PUMA experiment (fixed)



### **ELENA SEMs**

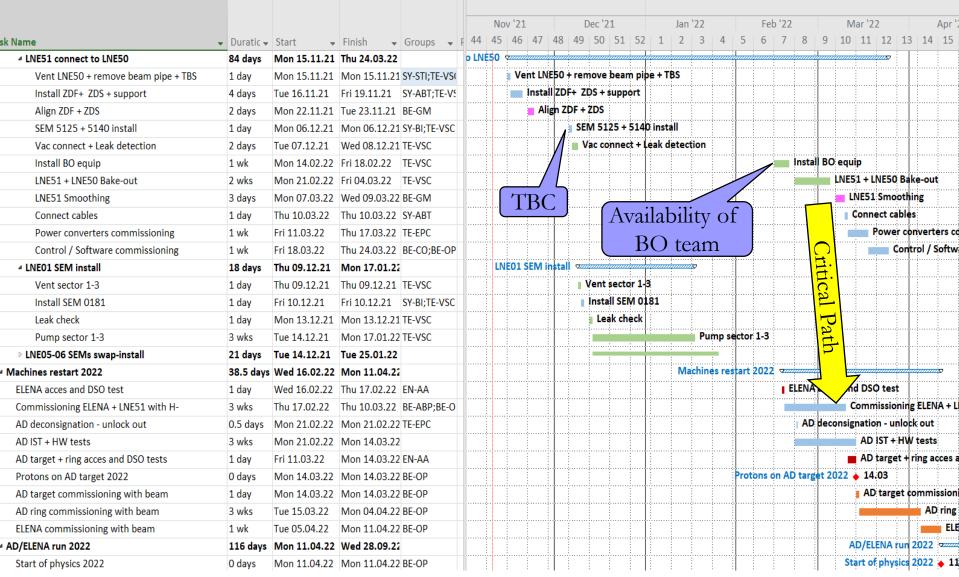






#### LNE51 - PUMA







### YETS planning – ELENA machine



					Nov '21	Dec '21	Jan '22	Feb '22
k Name 🔻	Duratic 🔻	Start ▼	Finish 🔻	Groups 🔻 I	44   45   46   47	48   49   50   51   52	1   2   3   4	5 6 7 8 9
△ LNE01 SEM install	18 days	Thu 09.12.21	Mon 17.01.22		LNE01 SEM in:	stall <u>variannimuminanni</u>	mminmis	
Vent sector 1-3	1 day	Thu 09.12.21	Thu 09.12.21	TE-VSC		Vent sector 1-3		
Install SEM 0181	1 day	Fri 10.12.21	Fri 10.12.21	SY-BI;TE-VSC		Install SEM 018	1	
Leak check	1 day	Mon 13.12.21	Mon 13.12.21	TE-VSC		Leak check		
Pump sector 1-3	3 wks	Tue 14.12.21	Mon 17.01.22	TE-VSC			Pump se	ctor 1-3
△ LNE05-06 SEMs swap-install	21 days	Tue 14.12.21	Tue 25.01.22		LNE05-06 SEMs swa	nstall •		
Vent sector 5-6	1 day	Tue 14.12.21	Tue 14.12.21	TE-VSC		<b>■</b> Vent sector	5-6	
Install SEM 0611	1 day	Wed 15.12.21	Wed 15.12.21	TE-VSC		<b>■ Install SEM</b>	0611	
Leak check	1 day	Thu 16.12.21	Thu 16.12.21	TE-VSC	TBC	■ Leak check		
Pump sector 5-6	3 wks	Fri 17.12.21	Thu 20.01.22	TE-VSC			Pump	sector 5-6
Vent sector 5	1 day	Fri 17.12.21	Fri 17.12.21	TE-VSC		■ Vent secto	or 5	
Install SEM 0520 0546	1 day	Mon 20.12.21	Mon 20.12.21	SY-BI;TE-VSC		Install Si	EM 0520 0546	
Leak check	1 day	Tue 21.12.21	Tue 21.12.21	TE-VSC		∥ Leak dh	eck	
Pump sector 5	3 wks	Wed 05.01.22	Tue 25.01.22	TE-VSC			Pui	mp sector 5



### Other activities / service disruptions



						Nov '	21	Dec	'21		Jan '22		F	eb '22			Mar '2	2	
Task Name ▼	Duratic 🔻	Start •	Finish 🔻	Groups 🔻	F 44 4	45 4	16   47	48 49 5	0   51   52	2   1	2 3	4	5 6	7	8	9 1	10   11	12   1	.3 1
AD_ELENA Facilities	212 days?	Mon 15.11.21	Wed 28.09.22		acilitie	es 🚾													
△ Cooling water un-availability	51 days	Fri 26.11.21	Fri 18.02.22		r un-a	vailab	ility 🗷		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			,,,,,,,,,,,,,,	<i></i>					
Demineralized water unavailble 2021	3 days	Fri 26.11.21	Tue 30.11.21	EN-CV				Deminera	lized wate	r unava	ilble 20	21	:		:	i			1
Demineralized water unavailble Xmas 2021	<b>⊉</b> days	Tue 21.12.21	Wed 05.01.22	EN-CV						De	mineral	ized w	ater ur	navailbl	e Xm	ıs 202	1		
Demineralized water unavailble 2022	5 days	Mon 14.02.22	Fri 18.02.22	EN-CV											Demi	neralia	ed wat	er unav	ailble
	5 days	Mon 14.02.22	Fri 18.02.22							Cryog	ennics	ın-ava	ilability	<u> </u>					
Cryo maintenance 2022 ?	1 wk	Mon 14.02.22	Fri 18.02.22	TE-CRG											Cryo r	nainte	nance	2022 ?	
△ Power cuts	3 days	Fri 26.11.21	Tue 30.11.21		Po	ower	cuts 🖾	<del>///</del>			:								
AUG tests 2021	2 days	Fri 26.11.21	Mon 29.11.21	EN-EL				AUG tests	2021		:		:		:				
Secured networks tests 2021	1 day	Tue 30.11.21	Tue 30.11.21	EN-EL				Secured n	etworks t	ests 202	1				:		:		
Ramp refurbishment	6 wks	Fri 17.06.22	Thu 28.07.22	SCE-SAM															
ELENA side crane maintenance + PUMA alim	8 wks	Tue 19.04.22	Thu 16.06.22	EN-HE											:		:		
4 YETS 21-22	92 days?	Mon 15.11.21	Tue 05.04.22		S 21-2	22 🚾													1111110
△ AD ring	70 days	Mon 15.11.21	Fri 04.03.22		AD rin	ng 🚾				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,	,,,,,,,,,,,		,,,,,,,,,	7//JQ			
Consignation - Lock-out	0.5 days	Mon 15.11.21	Mon 15.11.21	TE-EPC		j	Consign	ation - Lock-	out				:		:	i			1
Decabling AD old TLs	6 wks	Mon 17.01.22	Fri 25.02.22	EN-EL					1				:		C	ecabl	ing AD	old TLs	
Cabling BTV	2 days	Wed 19.01.22	Thu 20.01.22	EN-EL			TB	C, dep	endi	ng		Cablin	g BTV						
Cabling septa SMI/SME	1 day	Fri 21.01.22	Fri 21.01.22	EN-EL				on im	pact		I	Cablin	g sept	sMI/S	ME				
Cabling interlock doors/vac	2 days	Mon 24.01.22	Tue 25.01.22	EN-EL								Cal	oling in	terlock	doors	/vac			
Decabling racks bdg 370	1 day	Wed 26.01.22	Wed 26.01.22	EN-EL					()			Į D∈	cabling	racks l	bdg 3	70	:		
Magnet covers installation	4 wks	Mon 15.11.21	Mon 13.12.21	TE-MSC				<u> </u>	/lagnet cov	vers inst	allation								
Tests on cryo vac in sect 2B and 4	1 wk	Mon 17.01.22	Fri 21.01.22	TE-VSC								Tests	on cryc	vac in	sect	2B and	4		
CO2 Finement cavity upgrade	3 wks	Mon 24.01.22	Fri 11.02.22	SY-RF										C02 F	inem	ent ca	vity up	grade	
C10 maintenance	4 wks	Mon 07.02.22	Fri 04.03.22	SY-RF					()						······································	C1	l0 main	tenanc	2
												·							