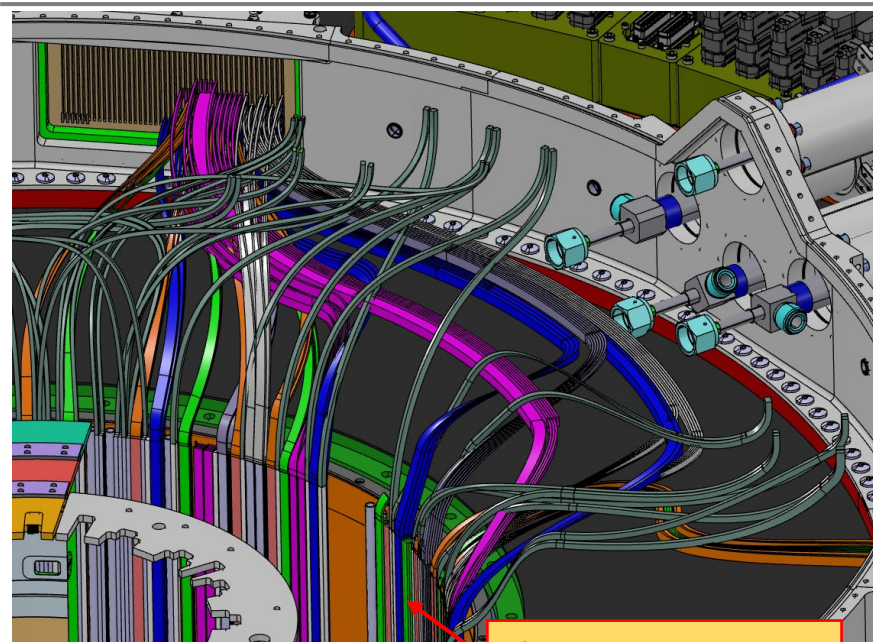


SEM Meeting



INFN-LNF
Filippo Rosatelli
04/12/2023



OUTER BARREL

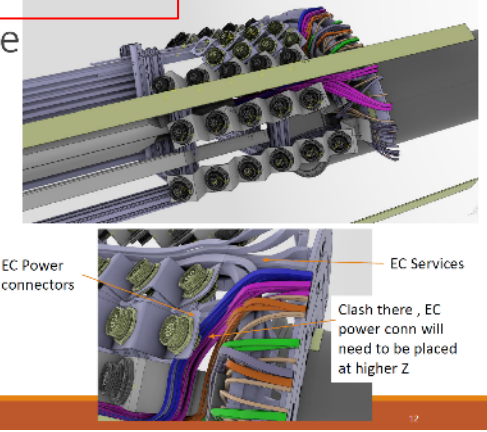
	A	B	C	D	E
1	G-OB-L2-816-A-SP-2-OP-3	G-OB-L2-816-A-SP-2-OP-2	G-OB-L3-R01-B-ASP-4-OP-8	G-OB-L3-R01-B-ASP-4-OP-7	G-OB-L4-R09-B-ASP-4-DC-10
2			2	2	8
3			3	3	7
4	G-OB-L2-815-A-SP-1-OP-1	G-OB-L2-816-A-SP-1-OP-1	G-OB-L3-R04-B-ASP-4-OP-8		6
5			G-OB-L3-R05-B-ASP-4-OP-8	5	G-OB-L4-R05-B-ASP-4-DC-10
6	G-OB-L2-815-A-SP-2-OP-2		6	6	G-OB-L4-R04-B-ASP-4-DC-10
7			7	7	3
8		G-OB-L2-R06-B-ASP-4-DC-8			2
9		4	G-OB-L4-R09-B-ASP-4-OP-8	G-OB-L4-R04-B-ASP-4-OP-8	G-OB-L4-R01-B-ASP-4-DC-10
10	G-OB-L2-814-A-SP-1-OP-1		8	3	
11			7	6	
12	G-OB-L2-814-A-SP-2-OP-2	G-OB-L2-R01-B-ASP-4-DC-8		G-OB-L4-R03-B-ASP-4-OP-8	
13		G-OB-L2-R01-B-ASP-4-DC-7	G-OB-L4-R05-B-ASP-4-OP-8	G-OB-L4-R09-B-ASP-4-DC-11	
14	G-OB-L2-814-A-SP-2-OP-3	G-OB-L2-R05-B-ASP-4-DC-7		8	
15	G-OB-L2-813-A-SP-2-OP-3	4		7	
16			G-OB-L4-R24-A-SP-2-OP-3	6	G-OB-L4-R04-B-ASP-3-DC-9
17	G-OB-L2-813-A-SP-2-OP-2	G-OB-L2-R02-B-ASP-4-DC-7		5	G-OB-L4-R01-B-ASP-3-DC-9
18		G-OB-L2-R02-B-ASP-4-DC-6	G-OB-L4-R24-A-SP-1-OP-1	G-OB-L4-R05-B-ASP-4-DC-11	G-OB-L4-R08-B-ASP-3-DC-8
19	G-OB-L2-813-A-SP-1-OP-1	G-OB-L2-R19-A-SP-2-OP-2	G-OB-L4-R23-A-SP-2-OP-3	G-OB-L4-R04-B-ASP-4-DC-11	G-OB-L4-R09-B-ASP-3-DC-9
20		G-OB-L2-R19-A-SP-2-OP-3	G-OB-L4-R23-A-SP-2-OP-2	3	7
21	G-OB-L2-812-A-SP-2-OP-3	G-OB-L2-R18-A-SP-2-OP-3	G-OB-L4-R23-A-SP-1-OP-1	2	6
22		G-OB-L2-R18-A-SP-2-OP-2	G-OB-L4-R22-A-SP-2-OP-3		G-OB-L4-R05-B-ASP-3-DC-9
23		G-OB-L2-R18-A-SP-1-OP-1	G-OB-L4-R22-A-SP-2-OP-2		
24	G-OB-L2-812-A-SP-2-OP-2	G-OB-L2-R17-A-SP-2-OP-3	G-OB-L4-R21-A-SP-1-OP-1	G-OB-L4-R04-B-ASP-3-DC-8	
25		G-OB-L2-R17-A-SP-2-OP-2	G-OB-L4-R21-A-SP-2-OP-2	2	
26	G-OB-L2-811-A-SP-1-OP-1	G-OB-L2-R16-A-SP-1-OP-1	G-OB-L4-R21-A-SP-1-OP-1	G-OB-L4-R01-B-ASP-3-DC-8	
27		G-OB-L2-R16-A-SP-2-OP-3	G-OB-L4-R20-A-SP-2-OP-3	G-OB-L4-R04-B-ASP-3-DC-8	
28	G-OB-L2-811-A-SP-2-OP-3	G-OB-L2-R16-A-SP-2-OP-2	G-OB-L4-R20-A-SP-2-OP-2	3	G-OB-L4-R09-B-ASP-3-DC-8
29		G-OB-L2-R16-A-SP-1-OP-1	G-OB-L4-R20-A-SP-1-OP-1		7
30	G-OB-L2-811-A-SP-2-OP-2	G-OB-L2-R15-A-SP-2-OP-3	G-OB-L4-R20-A-SP-1-OP-1	G-OB-L4-R01-B-ASP-3-OP-5	
31		G-OB-L2-R15-A-SP-2-OP-2	G-OB-L4-R20-A-SP-1-OP-1	G-OB-L4-R09-B-ASP-3-OP-5	
32	G-OB-L2-811-A-SP-1-OP-1	G-OB-L2-R15-A-SP-1-OP-1	G-OB-L4-R25-A-SP-2-OP-2	G-OB-L4-R08-B-ASP-3-OP-5	G-OB-L4-R05-B-ASP-3-DC-8
33		G-OB-L2-R15-A-SP-3-OP-3	G-OB-L4-R25-A-SP-2-OP-3		
34	G-OB-L2-810-A-SP-2-OP-3	G-OB-L2-R05-B-ASP-3-OP-3	G-OB-L4-R19-A-SP-2-OP-3	G-OB-L4-R07-B-ASP-3-OP-5	
35		G-OB-L2-R05-B-ASP-3-OP-1	G-OB-L4-R19-A-SP-2-OP-2	4	
36	G-OB-L2-810-A-SP-2-OP-2	G-OB-L2-R03-B-ASP-3-OP-3	G-OB-L4-R19-A-SP-1-OP-1	5	
37		G-OB-L2-R03-B-ASP-3-OP-1	G-OB-L4-R18-A-SP-3-OP-5		
38	G-OB-L2-810-A-SP-1-OP-1	G-OB-L2-R02-B-ASP-3-OP-3		G-OB-L3-R08-B-ASP-3-OP-6	
39		G-OB-L2-R02-B-ASP-3-OP-1		7	
40	G-OB-L2-809-A-SP-3-OP-3	G-OB-L2-R02-B-ASP-3-OP-3 DC5		6	
41		G-OB-L2-R02-B-ASP-3-OP-1	G-OB-L3-R05-B-ASP-3-OP-5	G-OB-L3-R05-B-ASP-3-OP-6	
42	G-OB-L2-809-A-SP-2-OP-3	G-OB-L2-R03-B-ASP-3-OP-3	G-OB-L3-R04-B-ASP-3-OP-5	G-OB-L3-R04-B-ASP-3-OP-6	
43		G-OB-L2-R04-B-ASP-3-OP-3	3	3	
44	G-OB-L2-809-A-SP-1-OP-1	G-OB-L2-R05-B-ASP-3-OP-3	2	2	
45		G-OB-L2-R06-B-ASP-3-OP-3	G-OB-L3-R01-B-ASP-3-OP-5	G-OB-L3-R01-B-ASP-3-OP-6	
46					
47					

DFT 6-7 MAPPING

FROM ERIC VIGEOLAS

Very limited space

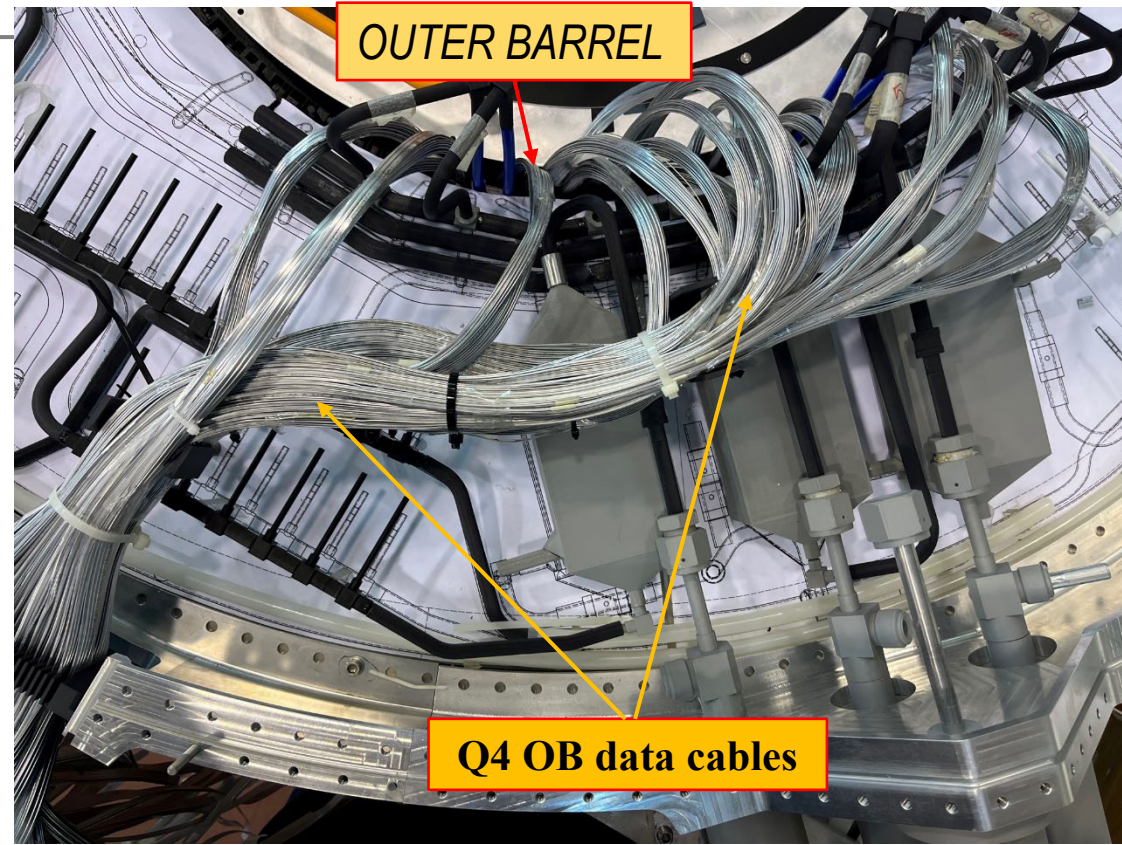
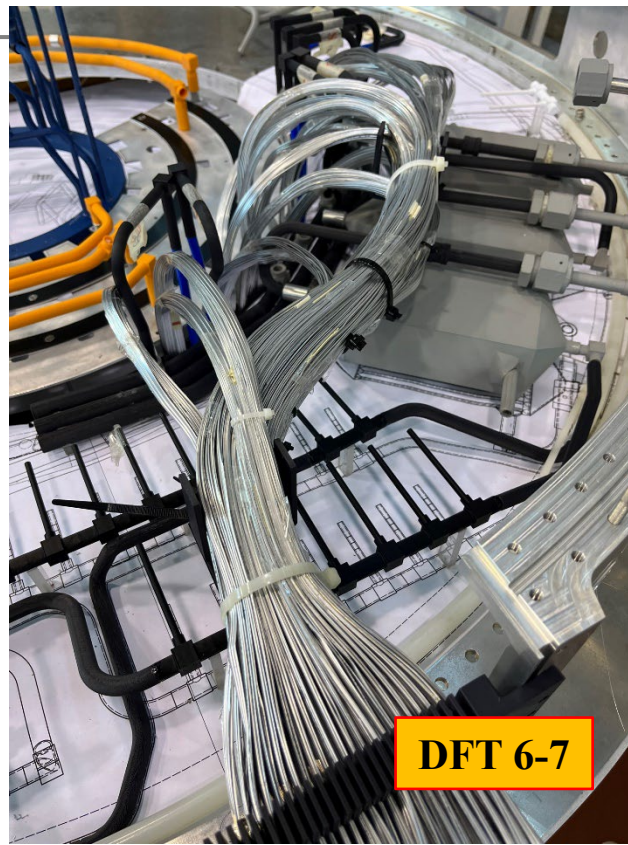
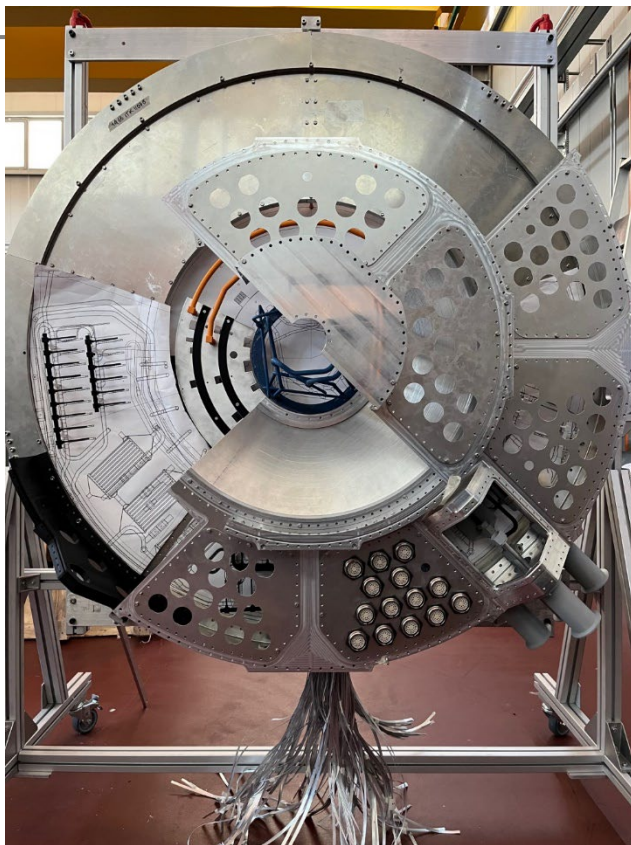
- When adding EC End Flanges and service + Rails envelopes + EC Trolley the space become very limited
- First consequence: Rails on the integration tool will need to be removed when passing from Opened to close configuration
 - No possibility to do differently cables from different Phi position are crossing the rail path
- This will impose the need to hold temporarily the trolley from the top during this phase
- This will be needed also after the insertion in Hk When the trolley will be disassembled for PP1 dressing
- OB Cables are routed at higher Z than EC cables, some adjustment are need between EC routing and OB routing



Bundle Complete Name	Length from EC Flange to PP1 connector		Slac	Length inside PP1 (Filippo's routing) [mm]	AL NEW
	New layout (mm)				
G-OB-L2-R01-B-ASP-4-PB	286	5%		362	76
G-OB-L2-R02-B-ASP-4-PB	284	5%		362	78
G-OB-L2-R01-B-ASP-3-PB	284	5%		322	38
G-OB-L2-R02-B-ASP-3-PB	282	5%		322	40
G-OB-L3-R01-B-ASP-4-PB	347	5%		399	52
G-OB-L3-R02-B-ASP-4-PB	344	5%		399	55
G-OB-L3-R01-B-ASP-3-PB	347	5%		369	22
G-OB-L3-R02-B-ASP-3-PB	348	5%		369	21
G-OB-L2-R03-B-ASP-4-PB	402	5%		342	-60
G-OB-L2-R04-B-ASP-4-PB	408	5%		339	-69
G-OB-L2-R03-B-ASP-3-PB	402	5%		425	23
G-OB-L2-R04-B-ASP-3-PB	418	5%		442	24
G-OB-L3-R05-B-ASP-4-PB	476	5%		483	7
G-OB-L3-R06-B-ASP-4-PB	465	5%		481	16
G-OB-L3-R05-B-ASP-3-PB	485	5%		488	3
G-OB-L3-R06-B-ASP-3-PB	483	5%		483	0
G-OB-L4-R01-B-ASP-4-PB	259	5%		517	258
G-OB-L4-R01-B-ASP-3-PB	267	5%		422	155
G-OB-L4-R07-B-ASP-4-PB	320	5%		374	54
G-OB-L4-R06-B-ASP-4-PB	317	5%		365	48
G-OB-L4-R06-B-ASP-3-PB	321	5%		371	50
G-OB-L4-R07-B-ASP-3-PB	328	5%		378	50
G-OB-L4-R21-A-PB	372	5%			
G-OB-L4-R22-A-PB	329	5%			
G-OB-L2-R13-A-PB	354	5%		380	26
G-OB-L2-R14-A-PB	406	5%		437	31
G-OB-L3-R18-A-PB	401	5%		410	9
G-OB-L3-R19-A-PB	468	5%		506	38
G-OB-L4-R23-A-PB	464	5%			
G-OB-L4-R24-A-PB	217	5%			
G-OB-L3-R20-A-PB	280	5%		471	191
G-OB-L3-R21-A-PB	285	5%		435	150
G-OB-L4-R25-A-PB	345	5%		406	61
G-OB-L4-R26-A-PB	338	5%		413	75
G-OB-L4-R27-A-PB	431	5%		507	76
G-OB-L4-R28-A-PB	462	5%		525	63
G-OB-H2-BH3-A-PW-12	500	5%		417	-83
G-OB-L2-R15-A-PB	254	5%		449	195
G-OB-L2-R16-A-PB	293	5%		392	99

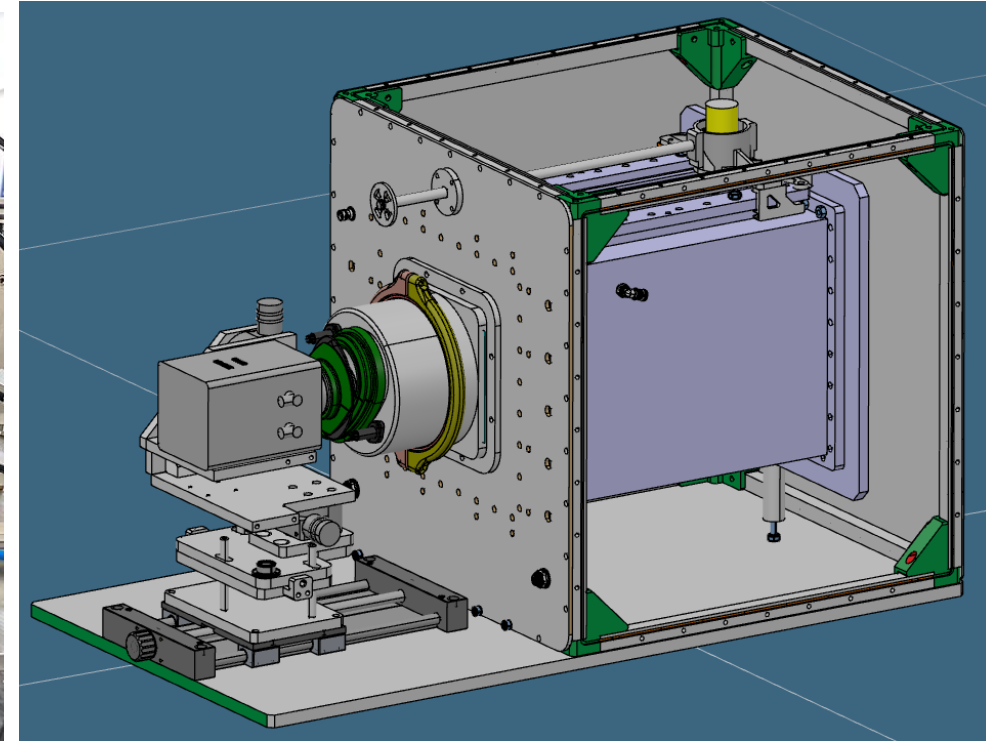
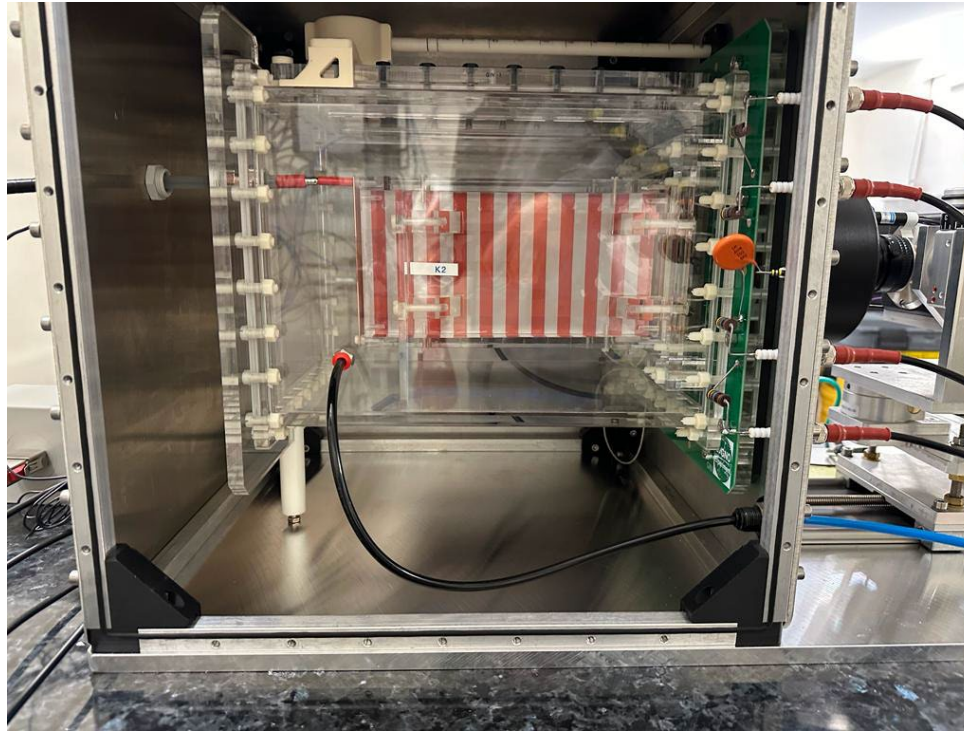
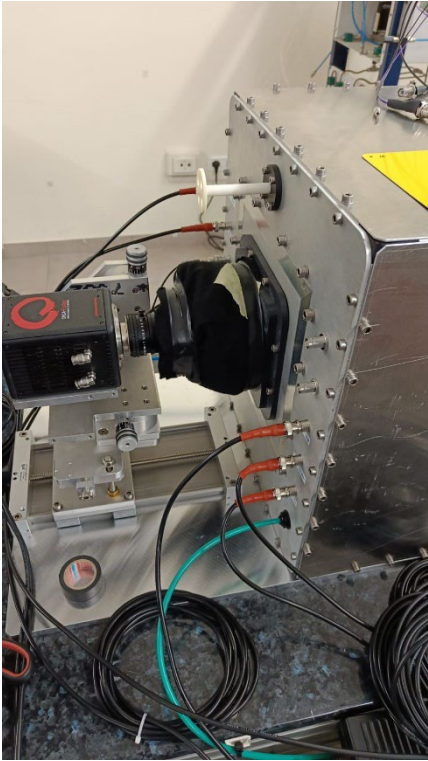
Activities:

- Review of data cables (Outer Barrel) routing inside the PP1 volume.
- Review the routing of HV/LV cables (OB) inside the PP1 volume.
- Cross check the lengths with services trolley (WIP).
- Data feedthrough 6-7(DFT) mapped to match the Outer volume request
- Same for DFT 1-8, work in progress (WIP).



Activities:

- Prepared and followed routing activity on the mockup.
- Parts for mockup.
- Cable support.
- Length estimation for a quarter of Outer barrel.



Activities:

- Support to the experiment.
- Gin prototype finished. Data taking.
- Second prototype in production.