

# Status of IB mechanics

Rosario Turrisi

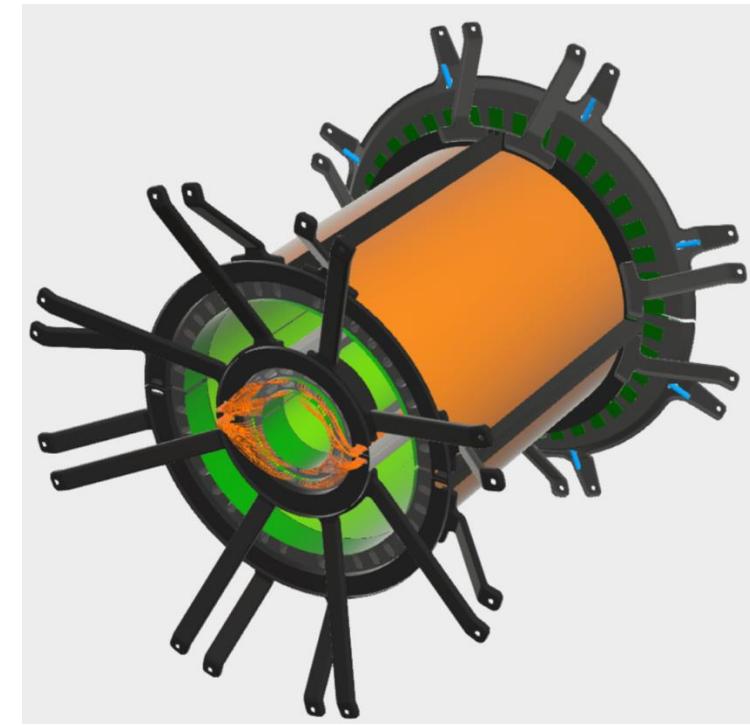
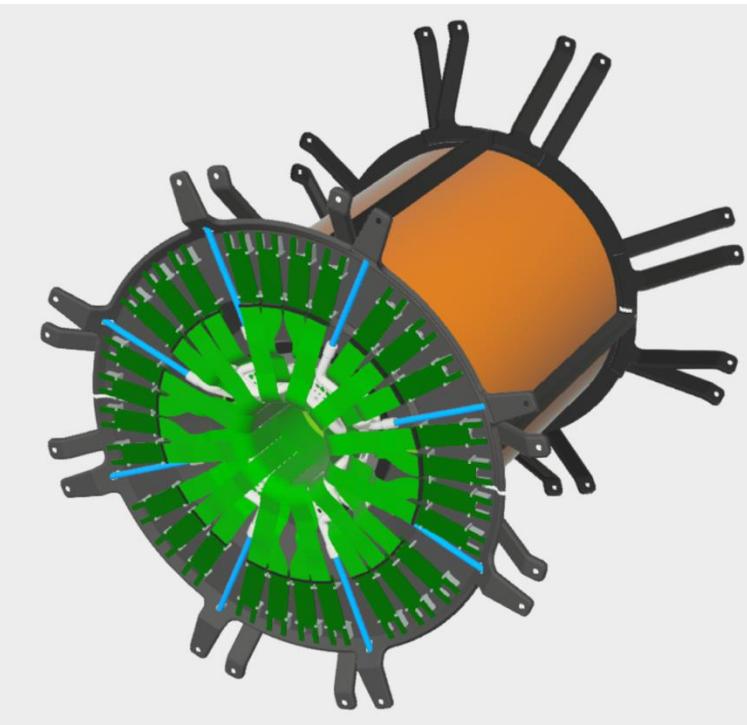
SVT working meeting

Oxford, UK

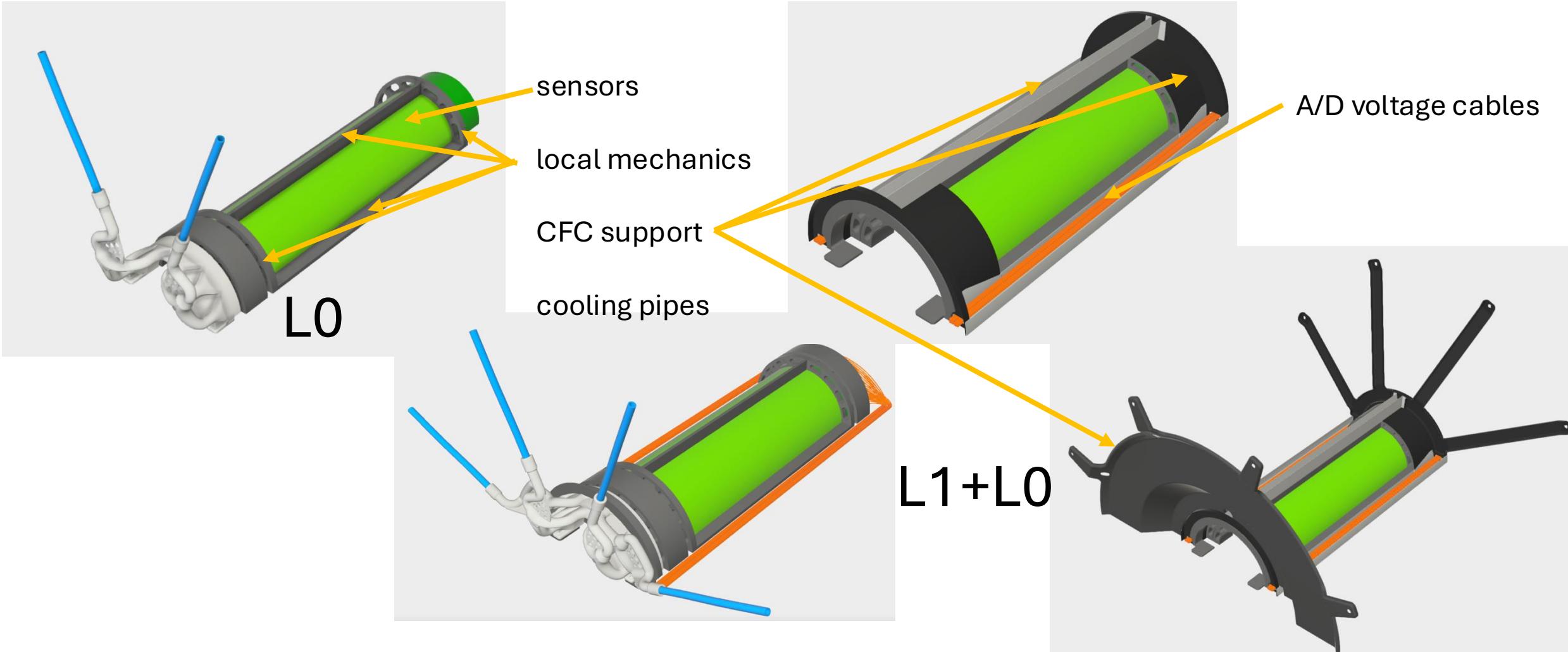
# Global IB support design status

Current global support design

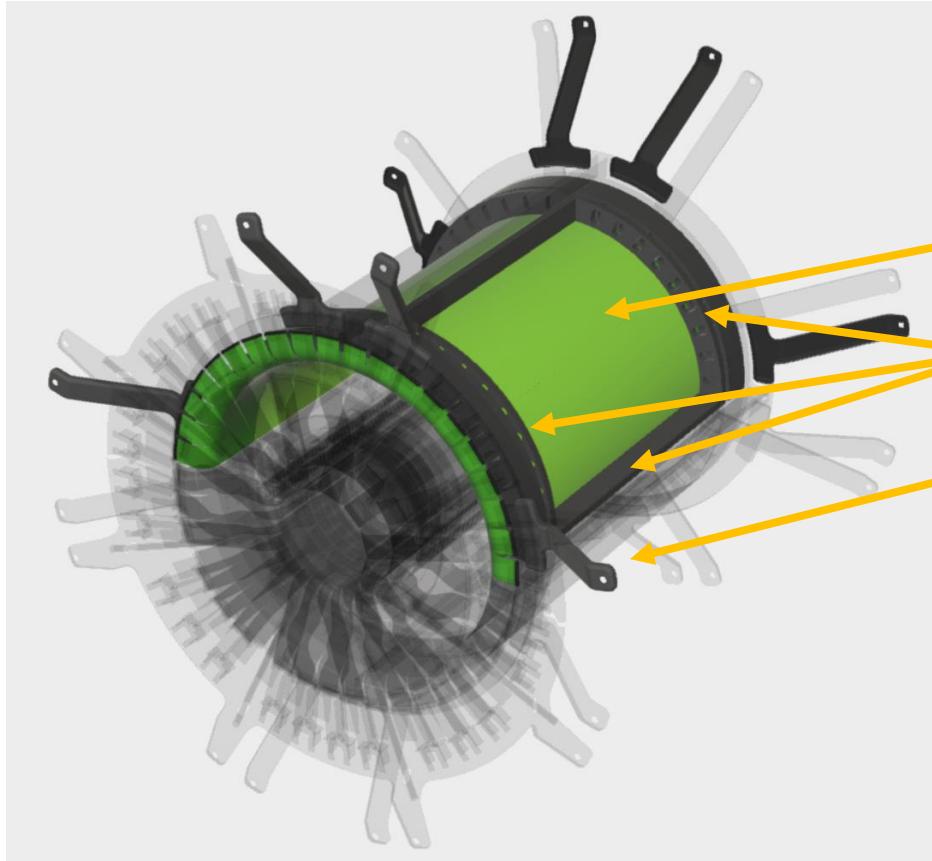
- added SIB boards (with caveats)
- extended h-side cone to support SIBs
- same will apply to L2 support
- new material budget soon will be checked



# L0 and L1 support



# Current L2 mechanical structure



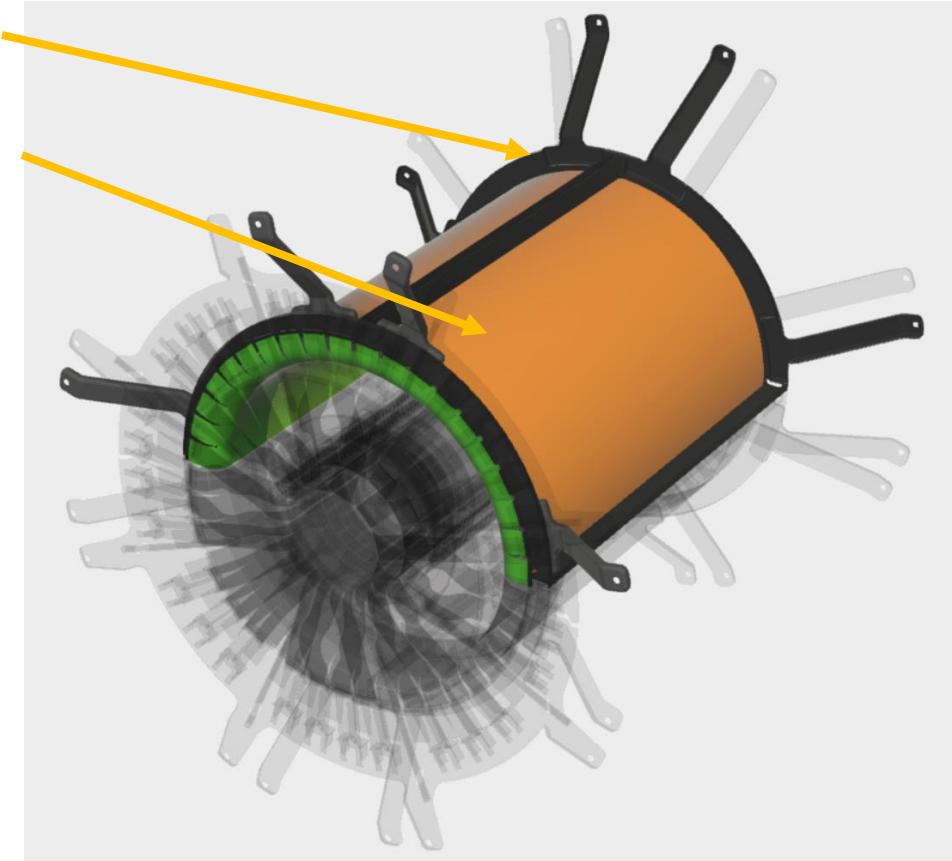
CFC support

kapton shield

sensors

local mechanics

supporting arms

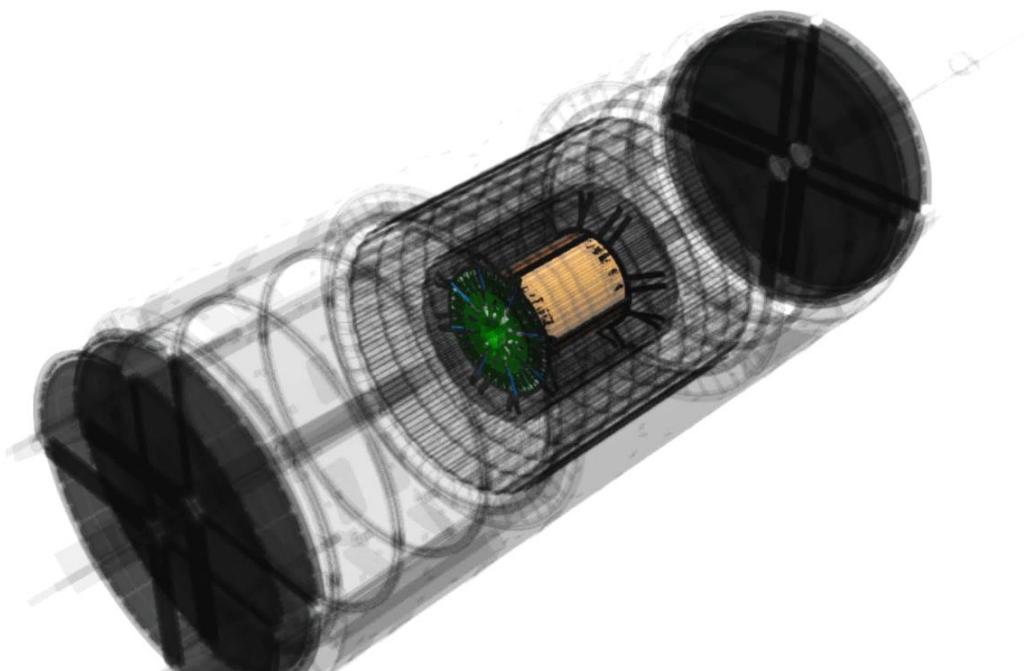


Air manifolds will be added – air flow foreseen between sensors and shield

# IB Support integration

Integration in the general CAD model

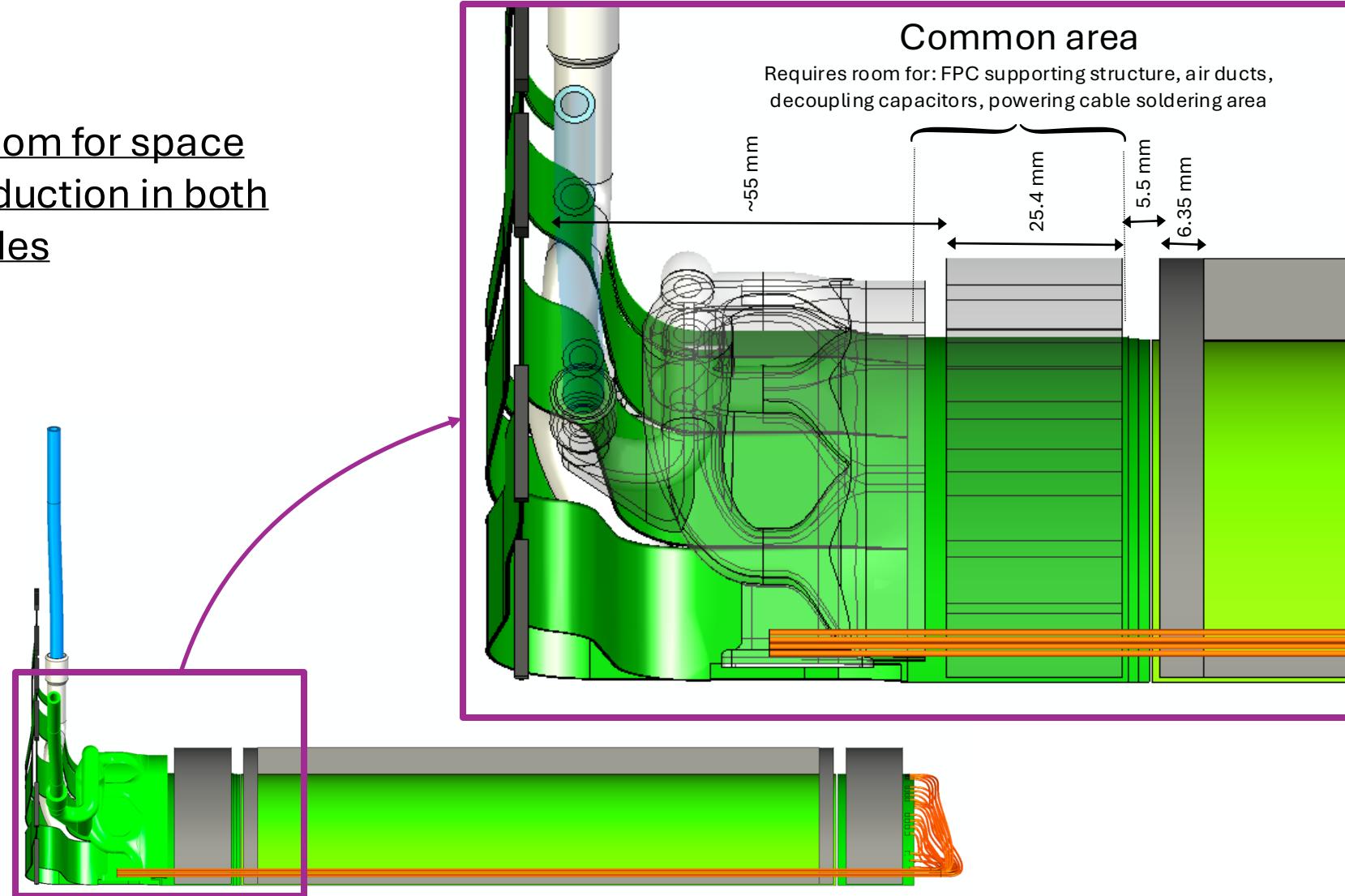
- last model delivered (10 dec)
- no interferences
- weight estimates published
- reference frame aligned with general CAD



HALF BARREL											BARREL	
	sensor	HalfRing + Longerons	FPC	CABLES	SUPPORT CABLE	HALF RING "h" SIDE	HALF RING "e" SIDE	FRAME AIR COOLING	CILINDER SUPPORT	COOLING SUPPORT		
<b>L0</b>												
density g/dm3	2330	230	8960	8960	1900	230	230	1320				
volume dm3	0	0.043	0.01	0.01	5E-04	0.025	0.03	0.03				
weight g	3.64	9.85	91.7	59.6	1.024	5.855	6.14	39.13				
											tot. 216.97	tot. gr 433.94
<b>L1</b>												
density g/dm3	2330	230	8960	8960	1900	230	230	1320	1650	1650		
volume dm3	0	0.045	0.01	0.01	7E-04	0.032	0.03	0.028	0.039	0.006		
weight g	4.85	10.44	107	77.1	1.366	7.281	7.67	37.18	63.56	10.5		
											tot. 326.50	tot. gr 653.00
<b>L2</b>												
density g/dm3	2330	230	8960	8960	1900	230	230	1320	1650	1650		
volume dm3	0.01	0.175	0.02	N.N.	0.002	0.158	0.16	N.N.	0.07	N.N.		
weight g	12.1	40.3	148	N.N.	3.397	36.37	37.3	N.N.	114.9	N.N.	tot. 392.97	tot. gr 785.93
											TOT 936.43	TOTAL 1872.87

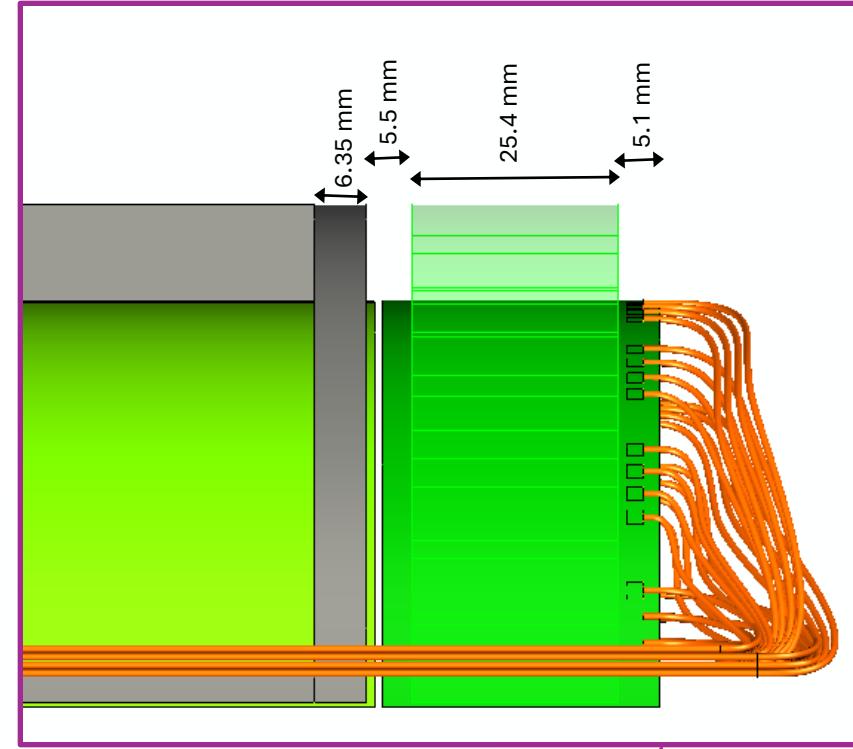
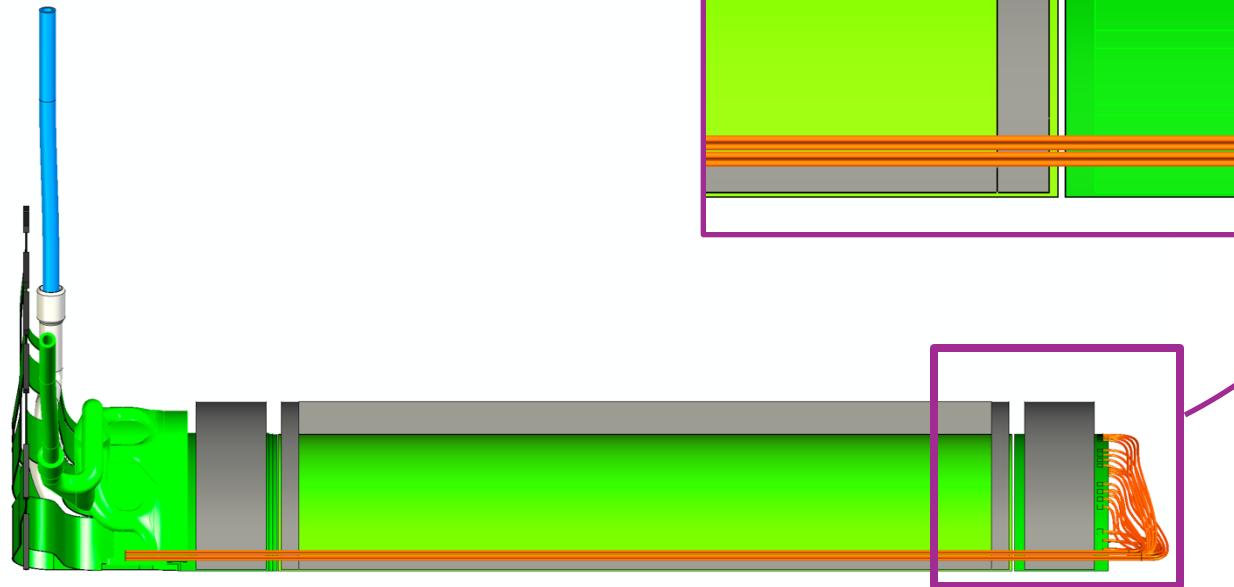
# Reshaping of FPC and support – h side

Room for space  
reduction in both  
sides



# Reshaping of FPC and support – e side

Room for space  
reduction in both  
sides



Thank you for the attention