

TMS production

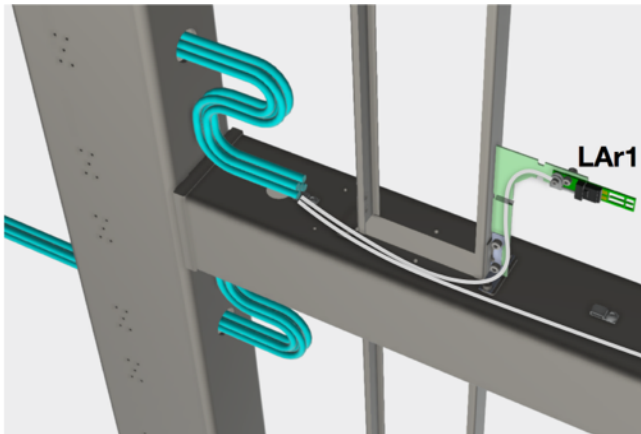
A. Cervera, J. Capó, M.A. García, J. Rocabado, J. Ureña
(IFIC-Valencia)

DUNE FD1 APA sensors

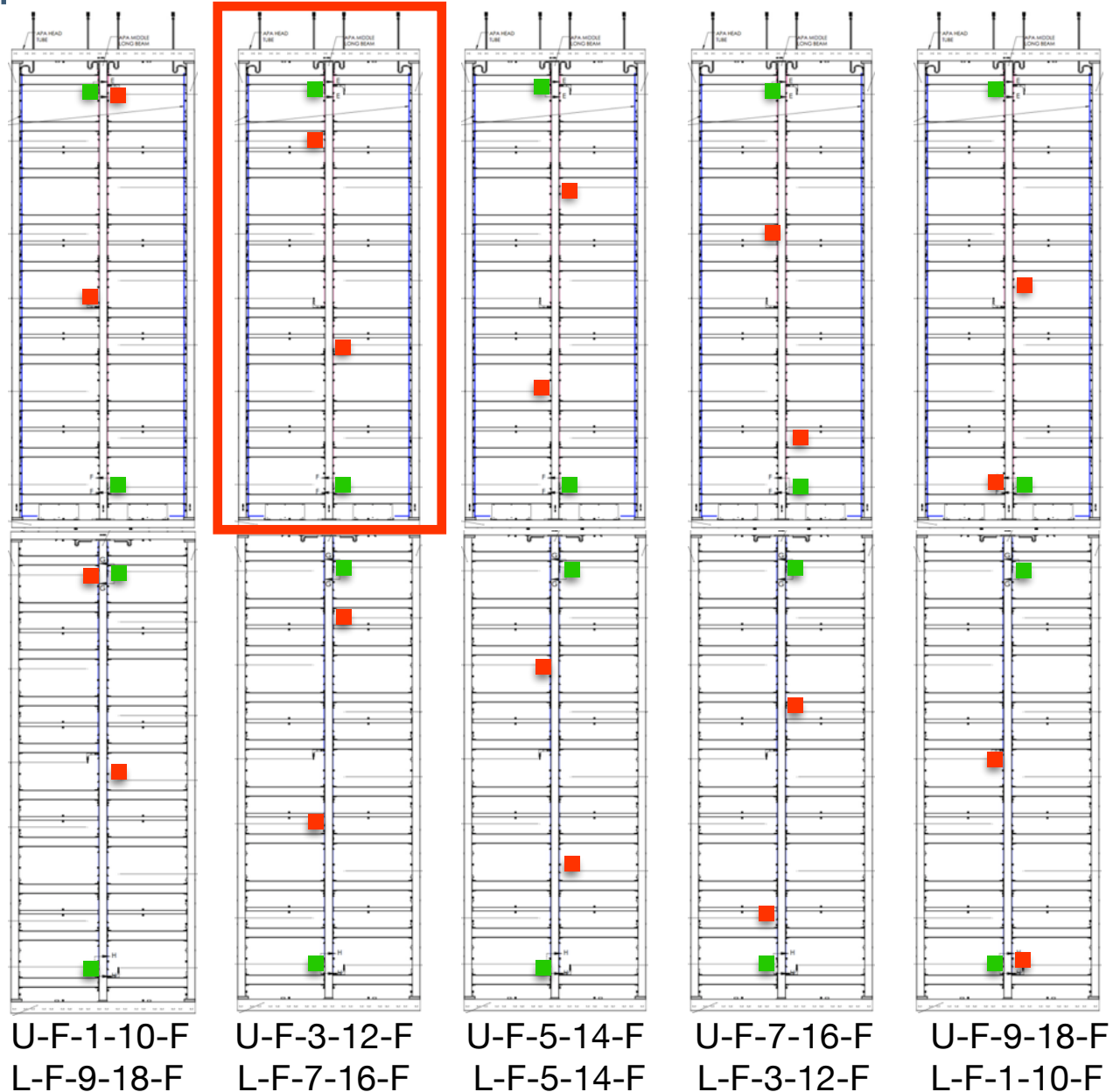
Type A doublets

- 5 configurations for upper APAs and 5 for lower APAs

Frame sensors at fix positions



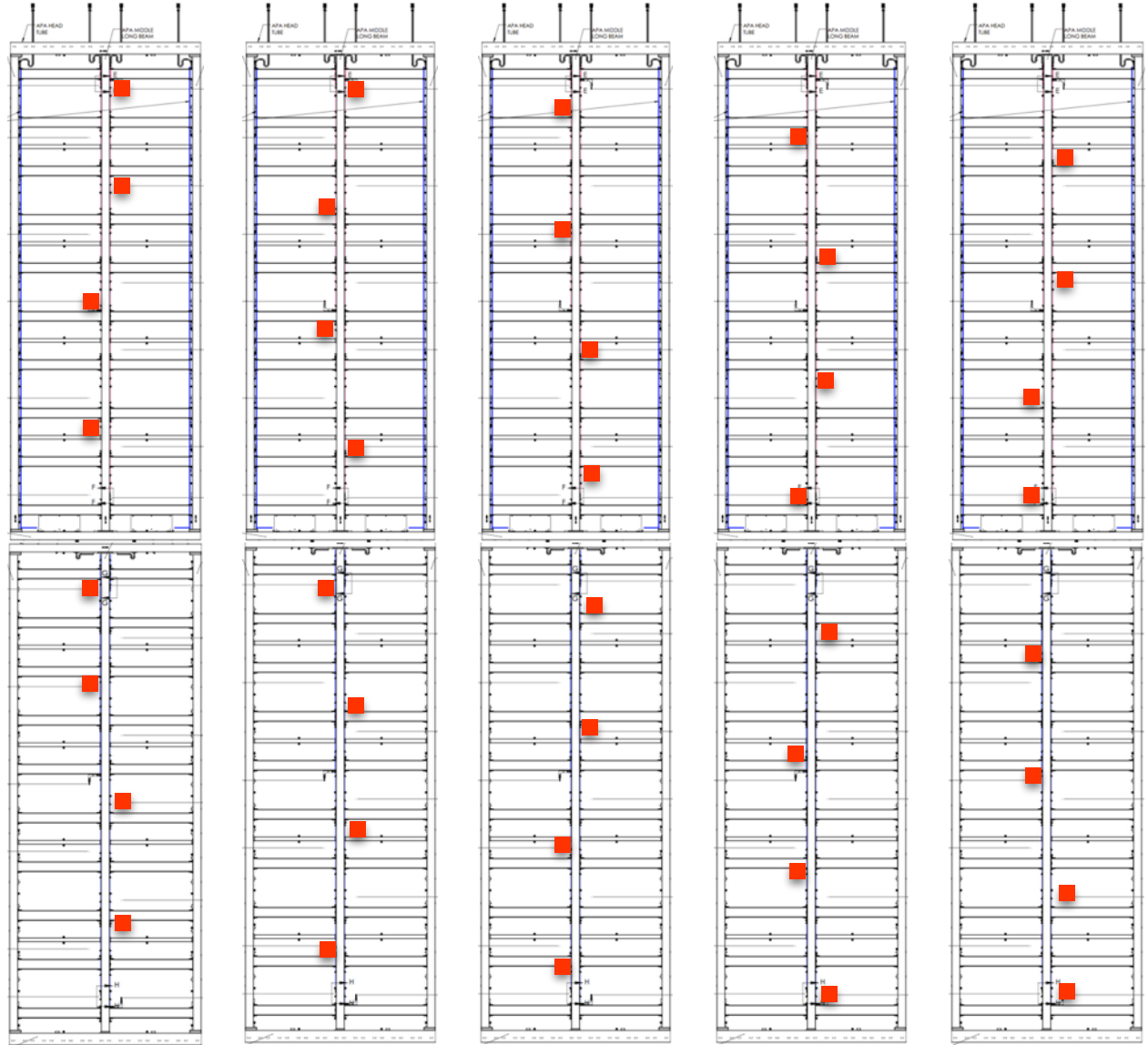
- frame sensor
- LAr sensor



Type B doublets

- 5 configurations for upper APAs and 5 for lower APAs

Requirement: two sensors in each side of the central beam



U-1-5-10-15
L-4-9-14-18

U- 1-6-11-16
L-3-8-13-18

U-2-7-12-17
L-2-7-12-17

U-3-8-13-18
L- 1-6-11-16

U-4-9-14-18
L-1-5-10-15

APA production

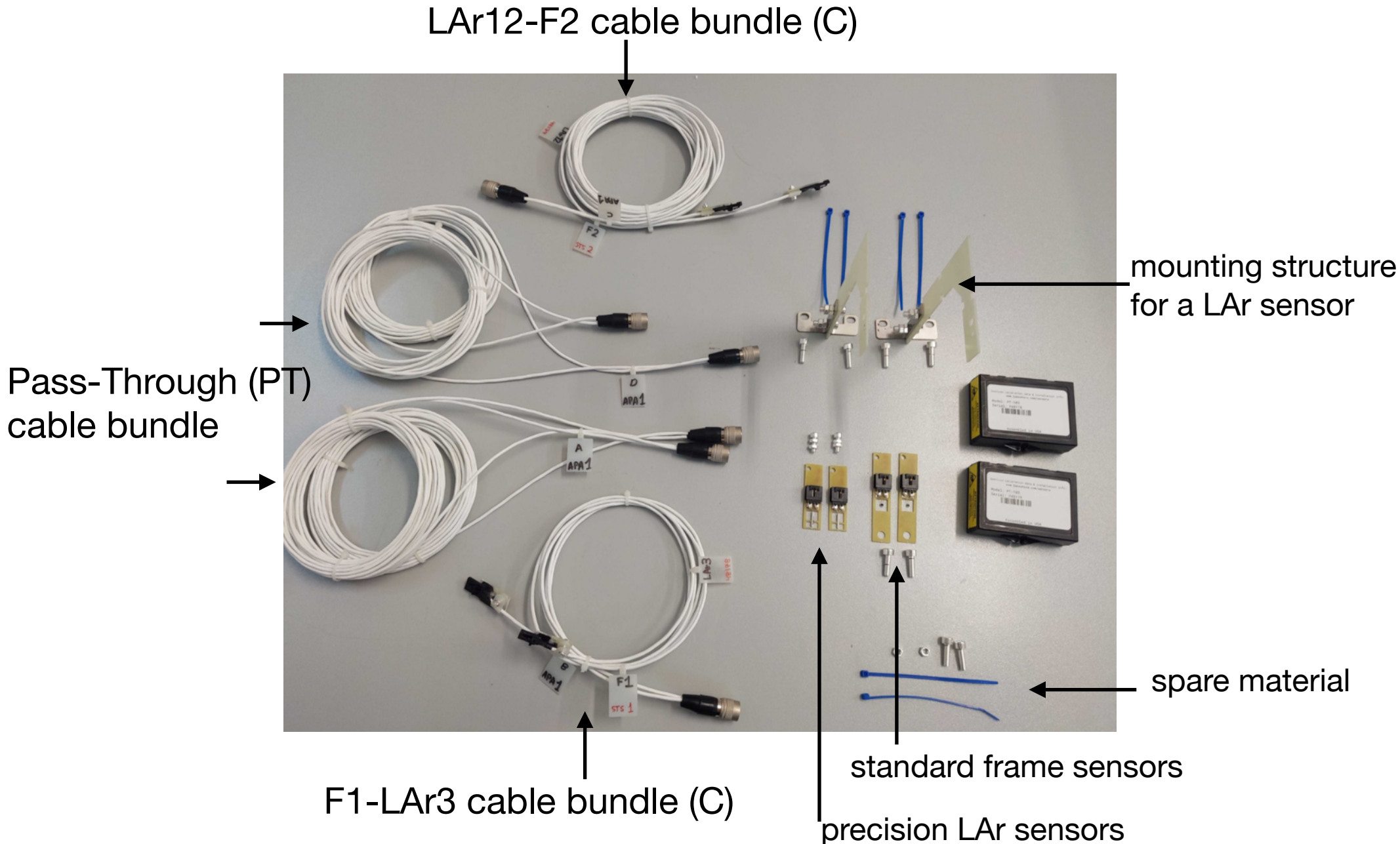
- APA production starts in February
- Last week we sent to Daresbury the necessary hardware for the first APA, which will be an upper one
- There will be 20 different configurations:

	Type A: 2 LAr+2 frame	Type B: 4 LAr
Upper	5 locations	5 locations
Lower	5 locations	5 locations

Schedule by J. Evans

Photon detector hardware to Daresbury				
Year	Week	Factory arrival date	Number of APAs	UK APA numbers
2022	5	31-Jan-22	2	1--2
	10	07-Mar-22	2	3--4
	16	19-Apr-22	4	5--8
	22	30-May-22	4	9--12
	28	11-Jul-22	4	13--16
	34	22-Aug-22	4	17--20
	40	03-Sep-22	4	21--24
	46	14-Nov-22	4	25--28
2023	2	09-Jan-23	4	29--32
	8	20-Feb-23	4	33--36
	14	03-Apr-23	4	37--40
	20	15-May-23	4	41--44
	26	26-Jun-23	4	45--48
	32	07-Aug-23	4	49--52
	38	18-Sep-23	4	53--56
	44	30-Oct-23	4	67--60
2024	50	11-Dec-23	4	61--64
	4	22-Jan-24	4	65--68
	10	04-Mar-24	4	69--72
	16	15-Apr-24	4	73--76
	22	27-May-24	4	77--80
	28	08-Jul-24	4	81--84
	34	19-Aug-24	4	85--88
	40	30-Sep-24	4	89--92
2025	46	11-Nov-24	4	93--96
	2	06-Jan-25	4	97--100
	8	17-Feb-25	4	101--104
	14	31-Mar-25	4	105--108
	20	12-May-25	4	109--112
	26	23-Jun-25	4	113--116
	32	04-Aug-25	4	117--120
	38	15-Sep-25	4	121--124
	44	27-Oct-25	4	125--128

Material sent to Daresbury

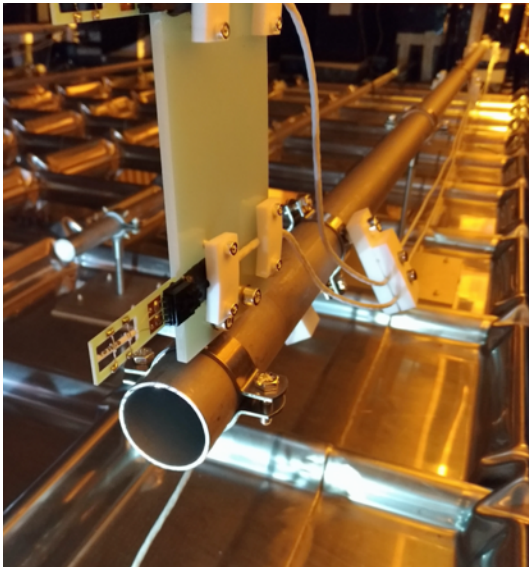


ProtoDUNE-II sensors

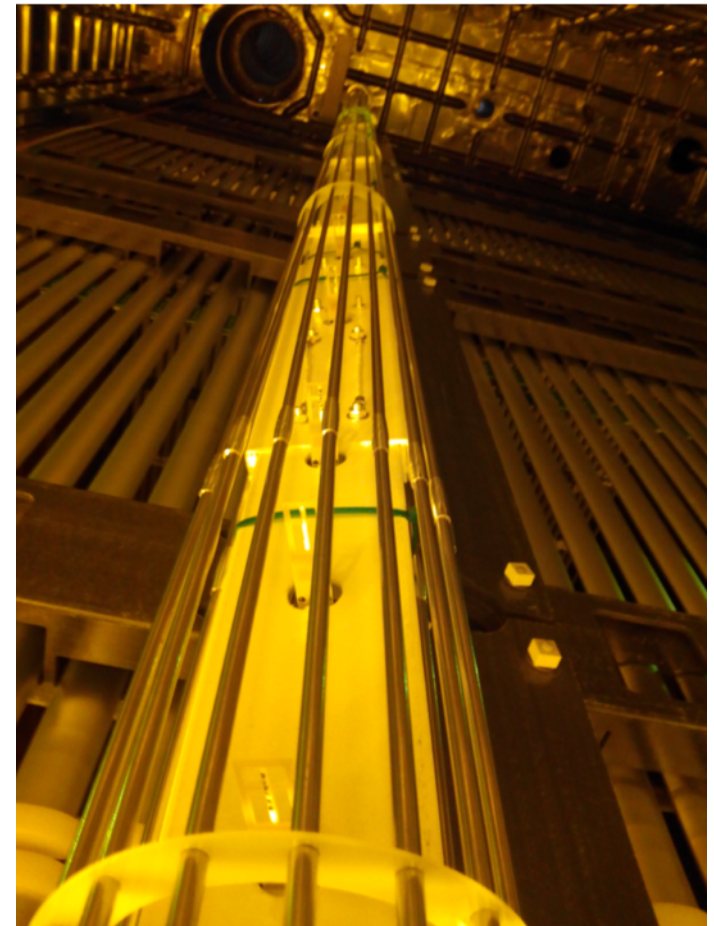
Recalibration

- Bottom sensors, top sensors and TGM sensors were dismantled in December
- They will be re-calibrated before reinstallation
- TGM will be installed in June

bottom sensors

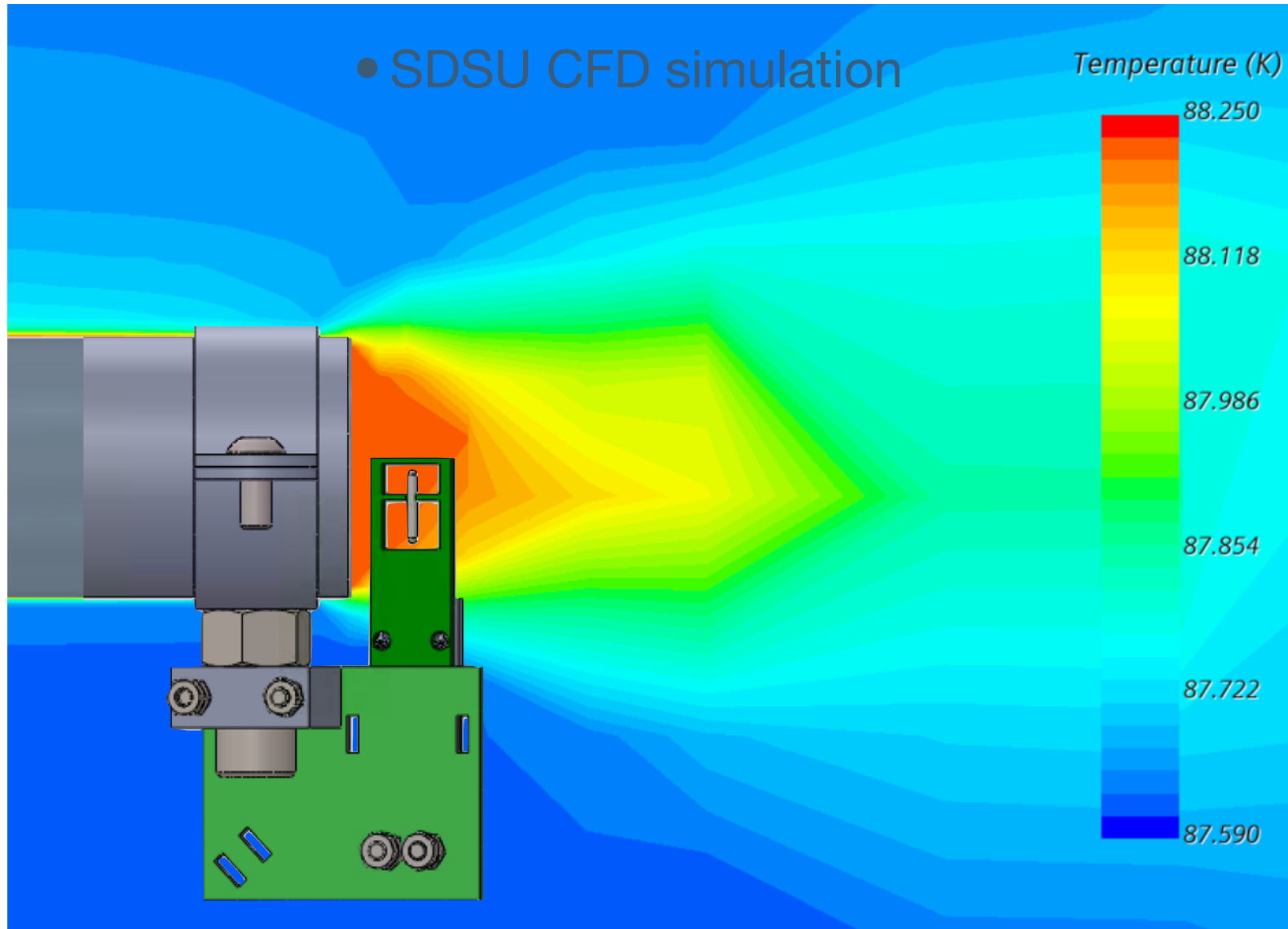


TGM



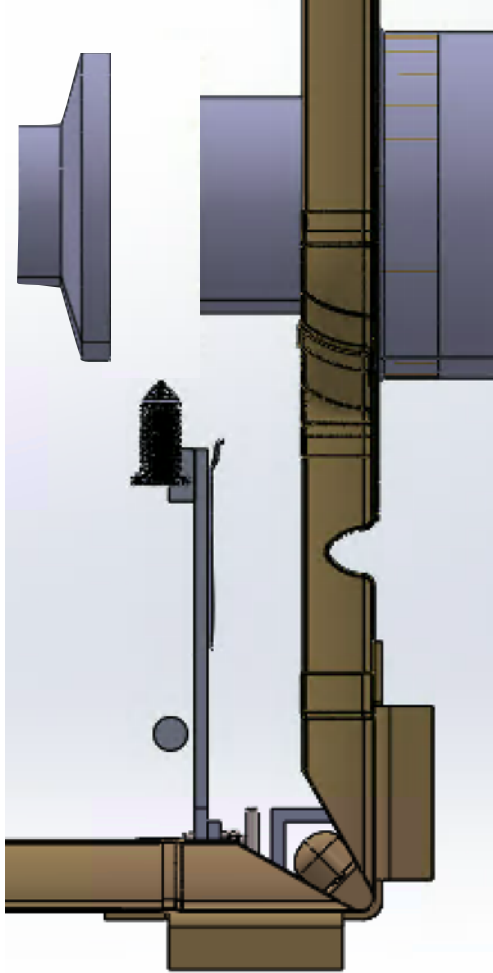
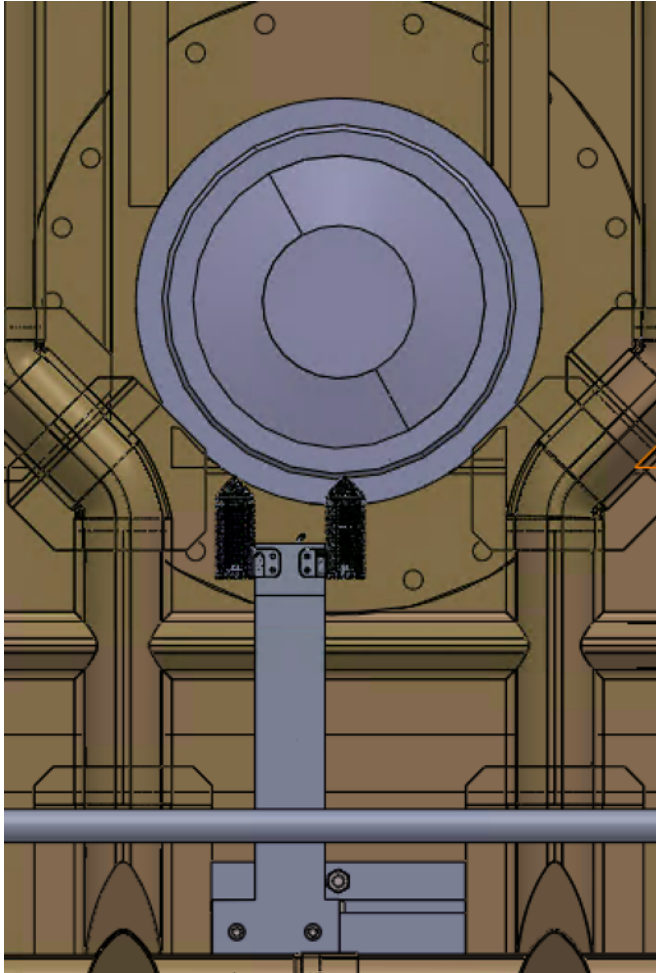
Inlet sensors

- To be installed in March



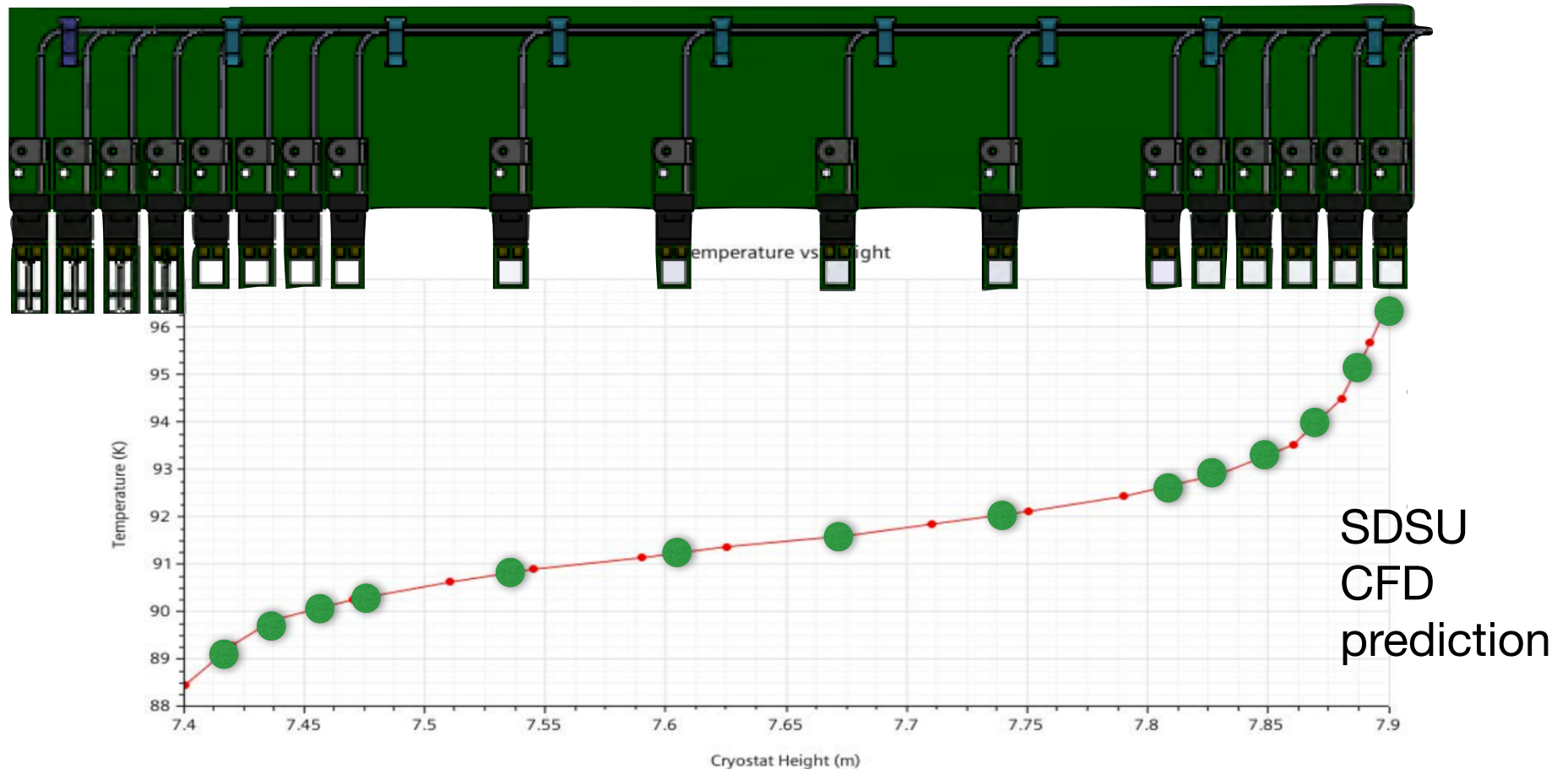
Pump sensors

- Cables will be installed in March. Mechanics and sensors later



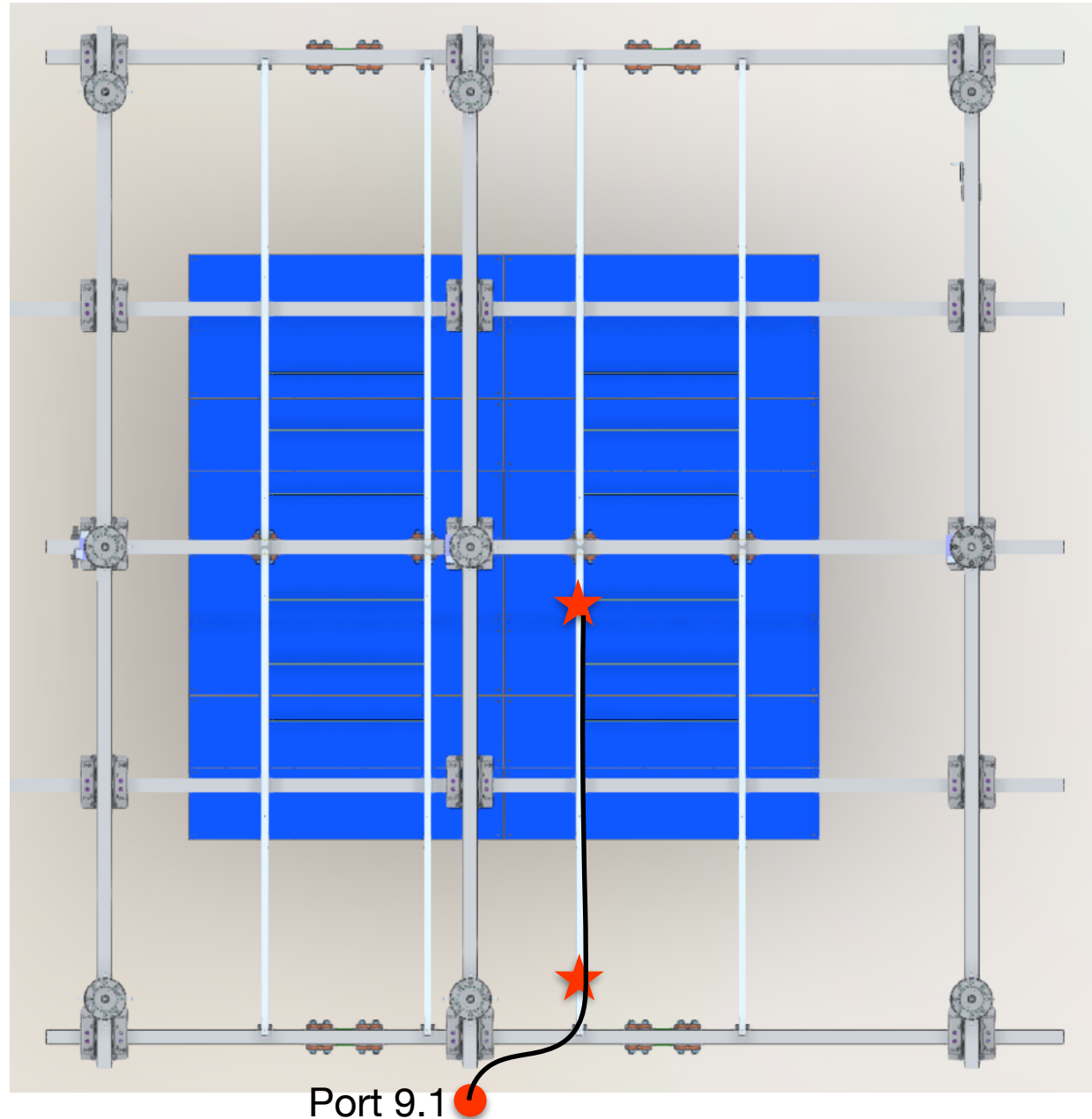
Gas arrays

- Since we don't know yet the final LAr level we will build it in two pieces such that the top sensor is very close to the top membrane and only the 4 precision sensors are submerged



System location

- After discussion with Filippo, Daniela, Bo & Francesco we set the GP beams as support structure
- This will be the location of the two systems and the cable routing path
- Anchoring mechanism to be designed



System location

