

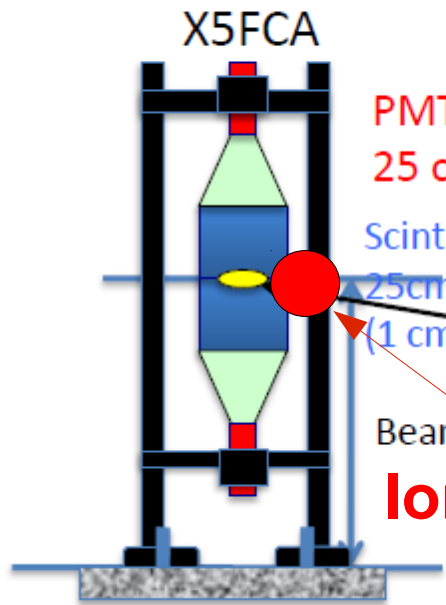
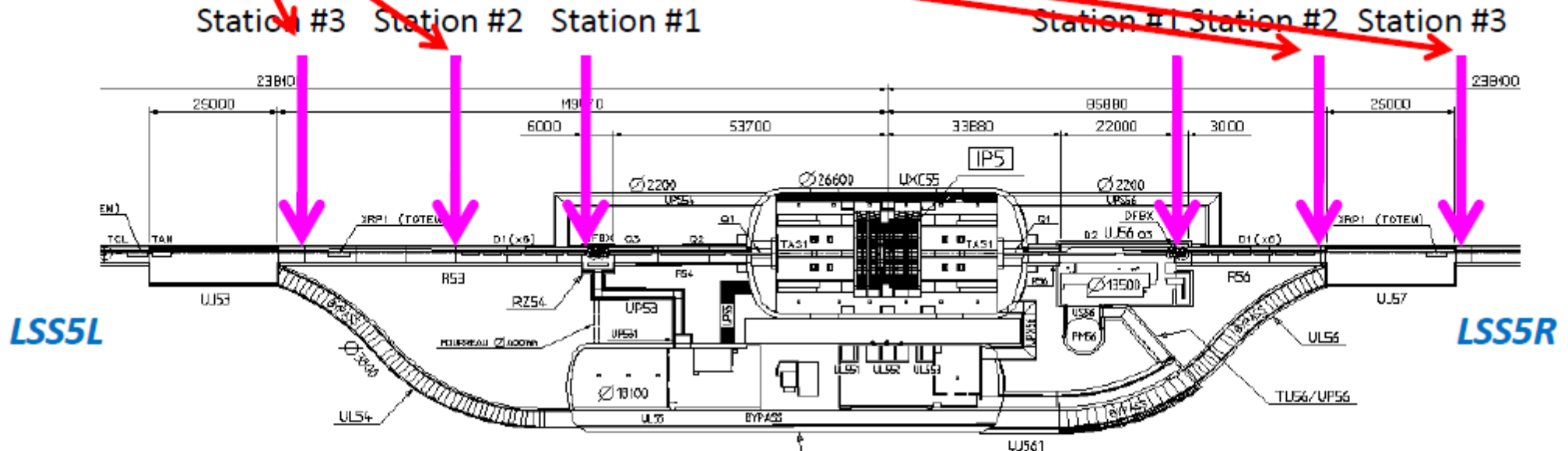
# CMS FSC ionisation chambers

- Installation of 4 ionisation chambers (2 left and 2 right of CMS, IP5)
- Purpose measure losses after the FSC **stations 2 an 3** seen from the IP (relative comparison of the detectors)
- Location:
  - Inside the ring
  - Horizontal mounting (as near as possible to the vacuum chamber)
  - **25 to 30 cm behind the FSC scintillators**
  - At the hight of the beam pipe

# Forward Shower Counter detector position in LSS5

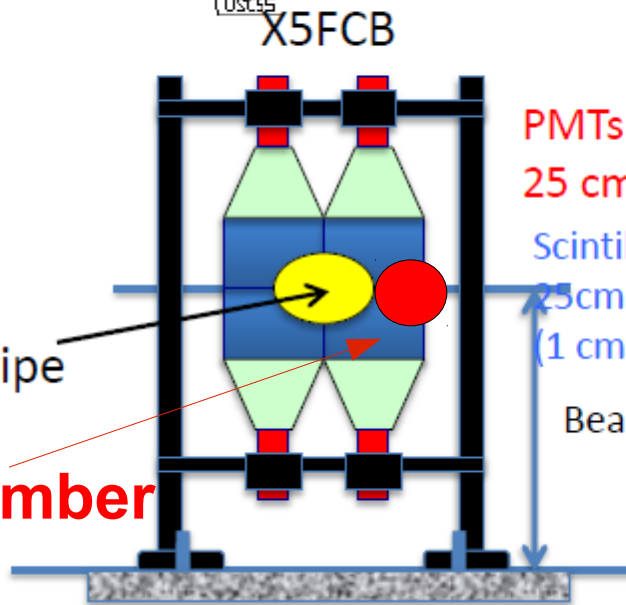


We need at St2 and 3



PMTs 8cm diam  
25 cm long  
Scintillator 25cm x  
25cm  
(1 cm thick)  
Beam pipe  
Beam height 97cm

**Ionisation chamber**



PMTs 8cm diam  
25 cm long  
Scintillator 25cm x  
25cm  
(1 cm thick)  
Beam height 97cm

<b>FULLNAME</b>	<b>VAC_NAME</b>	<b>ALTERNATE_NAME</b>	<b>S_START_ABS</b>	<b>IFT_EXTERNAL_ID</b>	<b>S_START_RELATIVE</b>
4L5	BLMES.808.4L5	BLMES.04L5.B2E10_TANC.4L5	13190.700000	HCBLM_S001-05000054	-138.741600
4L5	BLMEI.808.4L5	BLMEI.04L5.B2E10_TANC.4L5	13190.700000	HCBLM_I001-05001156	-138.741600
4L5	X5FCB.562.4L5	Station 3	13215.311600		-114.130000
4L5	X5FCA.271.4L5	Station 2	13244.361600		-85.080000
4L5	X5FCA.13.4L5	Station 1	13270.201600		-59.240000
4L5	BLMQI.2.4L5	BLMQI.03L5.B2E30_MQXA	13271.230600		-58.211000
4R5	BLMQI.10.4R5	BLMQI.03R5.B1E30_MQXA	13388.453600	HCBLM_I001-05002611	59.012000
4R5	X5FCA.13.4R5	Station 1	13388.681600		59.240000
4R5	X5FCA.270.4R5	Station 2	13414.381600		84.940000
4R5	X5FCB.562.4R5	Station 3	13443.591600		114.150000
4R5	BLMEI.822.4R5	BLMEI.04R5.B1E10_TANC.4R5	13469.631600	HCBLM_I001-05002114	140.190000
4R5	BLMES.822.4R5	BLMES.04R5.B1E10_TANC.4R5	13469.631600	HCBLM_S001-05000257	140.190000