

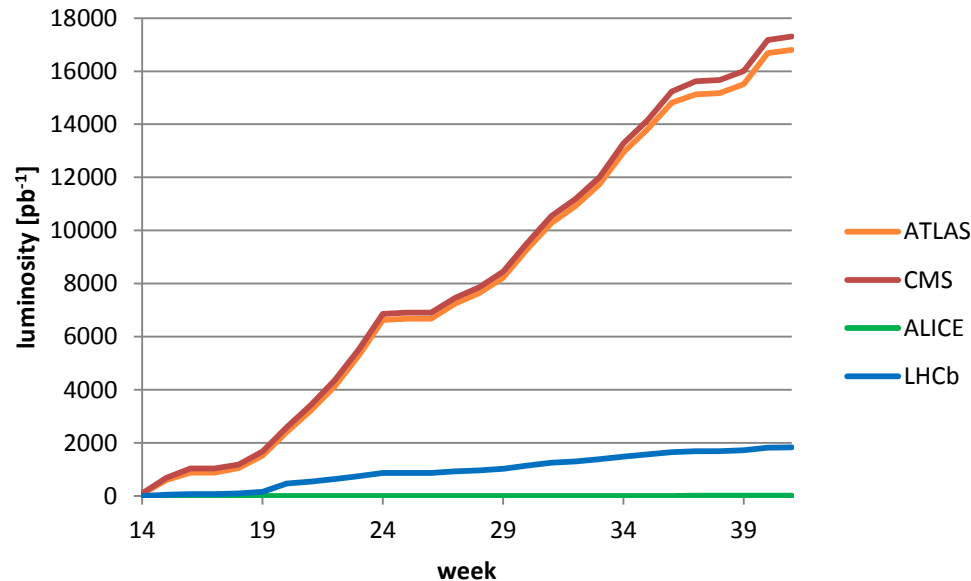
RADIATION LEVELS

P. Mala

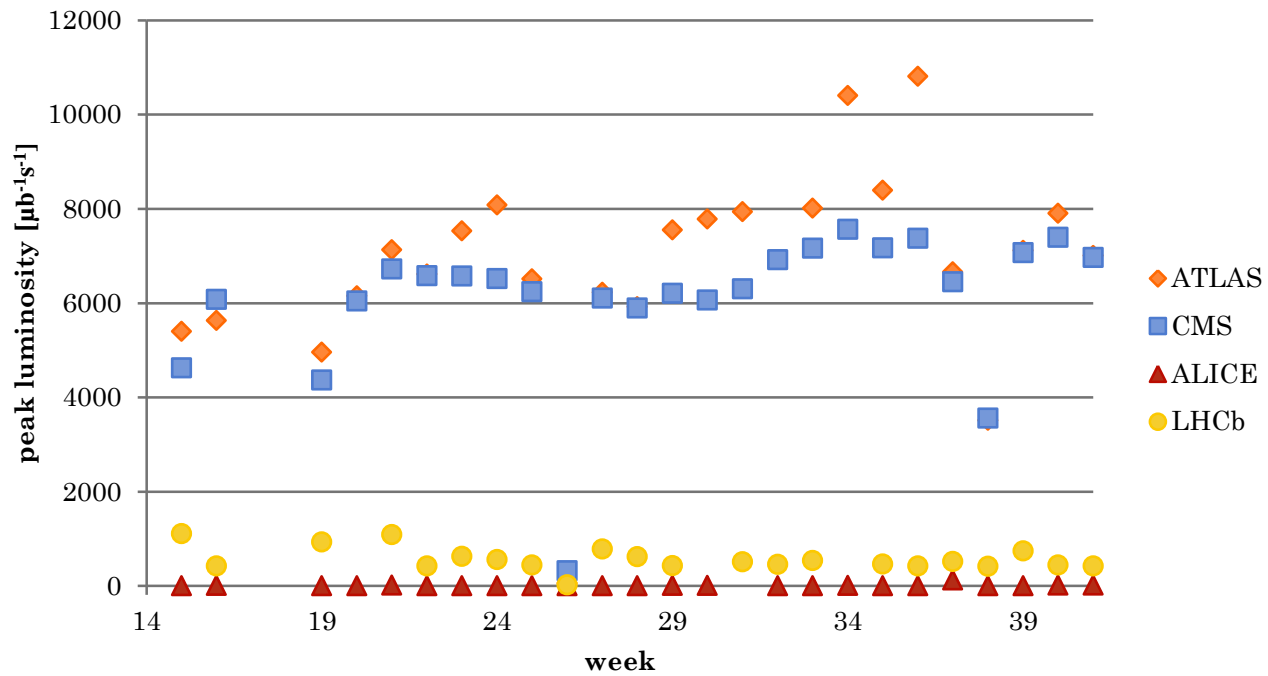
RadWG - 16th October 2012

LUMINOSITY

- **ATLAS:** 16.8 fb⁻¹ **CMS:** 17.3 fb⁻¹ **ALICE:** 16 pb⁻¹ **LHCb:** 1.8 fb⁻¹
- 9 more weeks of proton run in 2012
- Last year: **ATLAS:** 6 fb⁻¹, **CMS** 5.7 fb⁻¹



PEAK LUMINOSITY



UJs

	HEH [cm-2]			
	2012	2011	2012/1fb ⁻¹	2011/1fb ⁻¹
14	1.4E+08	2.7E+08	8.2E+06	4.5E+07
16	1.0E+08	2.2E+08	5.9E+06	3.7E+07
23	1.9E+06	1.5E+06	1.1E+05	2.5E+05
56	1.2E+08	3.9E+07	7.1E+06	6.5E+06
76	6.0E+07	6.4E+06	3.5E+06	1.1E+06
87	2.6E+06	3.0E+06	1.5E+05	5.0E+05

- P1 6x less
- P7 increase due to collimator loading
- P2/8 decrease

RRs

	HEH [cm-2]			
	2012	2011	2012/1fb ⁻¹	2011/1fb ⁻¹
13	1.3E+07	7.2E+06	7.6E+05	1.2E+06
17	1.9E+07	8.4E+06	1.1E+06	1.4E+06
53	1.9E+07	1.2E+07	1.1E+06	2.0E+06
57	2.0E+07	1.0E+07	1.2E+06	1.7E+06
73	4.1E+07	7.7E+06	2.4E+06	1.3E+06
77	2.0E+07	1.1E+07	1.2E+06	1.8E+06

- P1/5 decrease due to TCL effect
- P7 increase

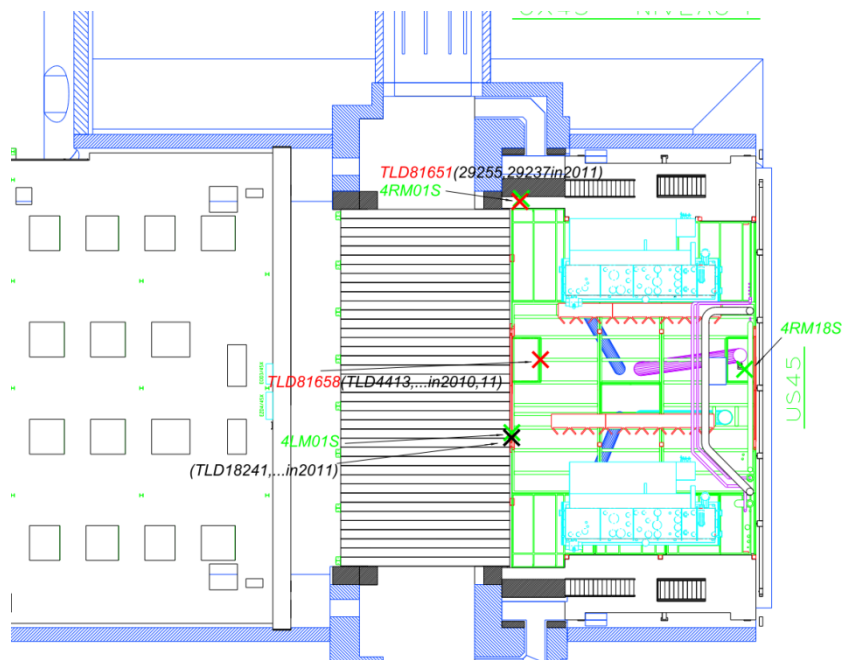
UX45, UX/S85

	HEH [cm-2]			
	2012	2011	2012/1fb ⁻¹	2011/1fb ⁻¹
UX45	1.4E+07	2.6E+06	8.2E+05	4.3E+05
UX85	2.8E+08	2.1E+08	1.6E+07	3.5E+07
US85	7.0E+07	4.4E+07	4.1E+06	7.3E+06

- P8 decrease
- P4 increase (beam gas)

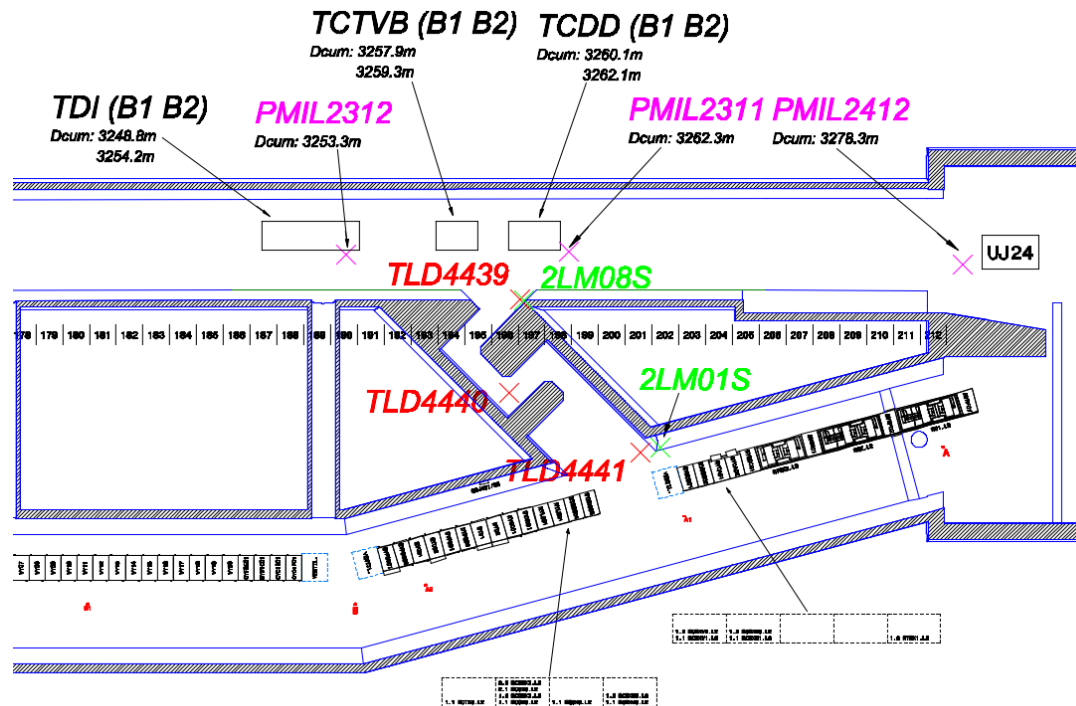
UX45

UX45	cavern		tunnel	
	HEH (cm-2/w41)	HEH (cm-2/2012)	HEH (cm-2/w41)	HEH (cm-2/2012)
US side (middle)	<1.0E+6	7.9E+06		
US side (right)	<1.0E+6	1.4E+07		
US side (PM)	<1.0E+6	2.6E+06		
RB44			5.2E+06	1.3E+09
RB46			8.6E+06	8.0E+08
PZ side	<1.0E+6	<1.0E+6		



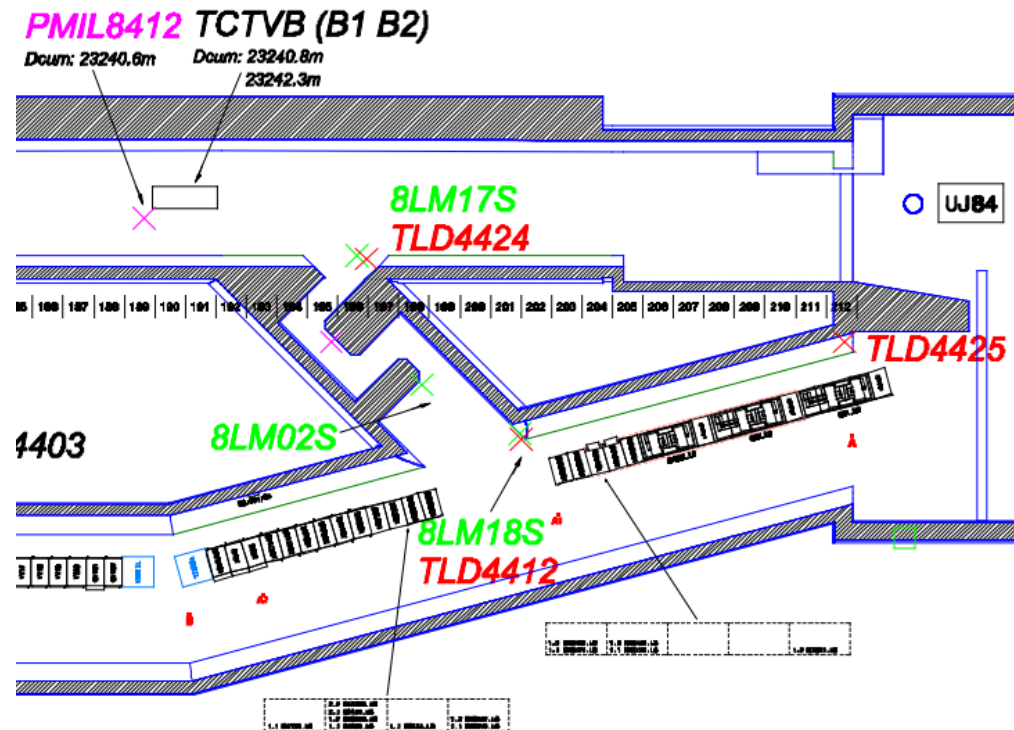
P2 – UA MAZE

- 2LM08S: 3.6E9 HEH
- 2LM01S: 3.9E6 HEH



P8 – UA MAZE

- 8LM17S: 8.8E9 HEH
- 8LM02S: 1.5E7 HEH
- 8LM18S: 1.3E6 HEH



UA23 DUCT

- 2LM07S: 1.8E10 HEH
- 2LM02S: 7.2E6 HEH

