Report from the MCWG, 3rd R2E Committee Meeting

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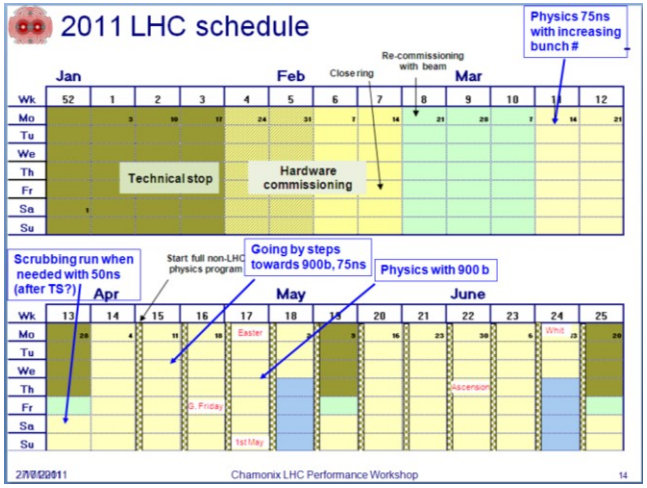
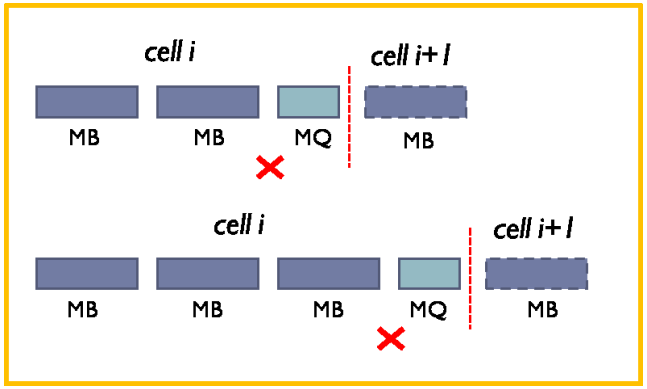
Update since the last R2E Project Meeting (1/3)

- Info from the last 3rd MCWG meeting (17th February): http://indico.cern.ch/conferenceDisplay.py?confId=126601

- **Highlight from Chamonix 2011 operation** (link)
  - *75 ns operation*
  - *Scrubbing at 50 ns after the 1st TS end of March*
  - *Beam-Gas issue in the ARC, QPS issue where firmware update has not been performed?*



- **RadMon relocation campaign summary** (link)
  - *Installation of new BatMons have been completed (triplets (UPS/UJ16, UPS/UJ56) + TDIs (RA87 + RA23) + UX15 + TOTEM)*
  - *"Standardization" of RadMon locations*



Update since the last R2E Project Meeting (2/3)

- **Summary of new extraction procedure for BLMs** (link)
  - *Improved method for evaluating the offset (very important!), 1.5-5*10^{-7} Gy/s*
  - *New data with sanity checks*
  - *Cumulated dose over 1 hour now available on TIMBER (monitorName:DOSE_INT_HH)*

- **BLM cumulative doses and expected hadron fluences** (link)
  - *Identification of highest loss locations, based on BLM cumulative dose*
  - *Using the RadMon/BLM ratio, HEH fluence estimated for locations where RadMons are not present (link to table)*
  - *Collimators + TANs are obvious location + hot-spots in cell 11 and certain cells of the ARC during ion operation*

- **Summary of 2010 operation in terms of intensity/luminosity** (link)

Summary (Protons)		
In	6.02E+15	
Dumped	5.82E+15	96.70%
Lost in Machine	1.99E+14	3.30%
Of Lost protons		
Collisions	2.33E+13	11.73%
Elsewhere	1.76E+14	88.27%

Summary (Ions)		
In	7.46E+13	
Dumped	6.36E+13	85.25%
Lost in Machine	1.10E+13	14.75%
Of Lost protons		
Collisions	3.77E+10	0.34%
Elsewhere	1.10E+13	99.66%

Update since the last R2E Project Meeting (3/3)

- **Updates on the TLD-extracted R values and comparison with FLUKA simulations for selected areas** (link)

Comments	TLD Rs (CNGS-based)	TLD Rs (CERF-based)	TLD Rs (combined)	R FLUKA simulations
UJ56 tunnel	**7.72**	**2.58**	**4.66**	**6**
UJ14 wall towards triplet	5.66	1.89	**3.21**	-
UJ16 wall towards triplet	5.25	1.76	**2.94**	-
UJ56 tunnel	**1.82**	**0.61**	**0.93**	**1**
UJ76 tunnel	**0.20**	**0.07**	**0.23**	**3**
UJ13 (shielding wall/maze)	41.93	14.03	**40.09**	-
UJ23 (next to door/line of sight)	0.87	0.29	**0.49**	-
RR77	0.95	0.32	**0.53**	-
towards RR77	**3.76**	**1.26**	**2.00**	**15**
UX85	**2.52**	**0.84**	**1.29**	**5.3**
UX85	**2.47**	**0.83**	**1.27**	**8.5**
UJ23	0.83	0.28	**0.48**	-
UJ88?	4.66	1.56	**2.56**	-

- *UJ56 tunnel scoring volumes are large (extending meters along UJ56 wall)*
- *UJ76 / RR77 / UX85 scoring volumes are small and localized (40x40x40 cm)*

- **Updates on P1 simulations** (link)
  - *Implementation of the RadMons/PMI/PAT for P1R tunnel*
  - *Application benchmark on 1RM03S, good agreement (within 5-10%) between RadMon SEU readings and FLUKA expected HEH fluence*