rMPP meeting MD1 & MD2

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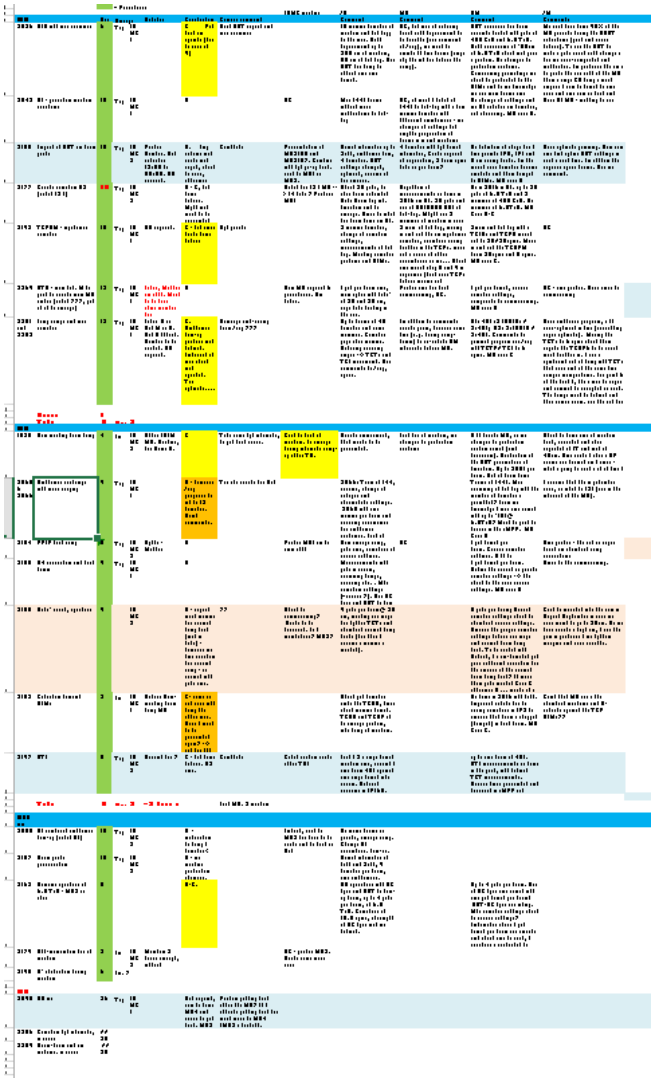
J. Uythoven, J. Wenninger, D. Wollmann, M. Zerlauth

MD1 and MD2

- Summary of the comments given by Jorg, Markus, Daniel and Jan on the procedures for the MD blocks #1 and #2
- All procedures at \\cern.ch\dfs\Users\u\uythoven\Public\LHC_MD_Procedures\2017
- This is the .xls file sent to the MD requesters last Sunday



MD#1 1/2

- MD#2036 UFO with wire scanner: Class C
  - Flying the wire while making individual bunch displacements with the ADT. 10 nominal bunches at injection and flat top.
- MD#2042 RF persistent injection oscillations: Class B
  - Usual RF MD, possibly lengthy preparation in the injectors. Max 144 b train.
- MD#2155 Impact of ADT on beam quality: Class B
  - 4 bunches with intensities up to 2e11, collisions at top energy. Clarify request of separation, 2 beam sigma total or per beam? Some steps not clearly defined (‘if time permits’), optimistic planning.
- MD#2177 Crystal collimation: Class B-C, but presented before, so not today
  - 25 pilots, relaxed SBF
  - Potential addition: linear collimator scan with a collimator not located in IR7, in order to see if we control with the required accuracy the dynamics of the channeled halo particle.

MD#1 2/2

- MD#2193 TCPSM – collimator impedance: Class C
  - 2 nominal bunches, change of collimation settings, masking collimator positions
  - Should one invert step 8 and 9 in sequence (first close TCPs before moving out secondary's?)

- MD#2269 ATS – non flat: Class B
  - 1 pilot per beam only, standard optics commissioning

- MD#2201 and #2202 Long range and Wire collimator: Class C
  - Emittance blow-up protocol not defined. Should check interlocks of wire at the start. Very optimistic.
  - Trains of 48. With TCT at 6 sigma, should move TCSP6 in closer; risk of dumping with TCTs at 6 sigma. Point 6 of procedure too vague. Bumps to be defined in detail with amplitudes

MD#2 1/2

- MD#1828 Non working beam dump: Class C
  - Test at injection only. No changes of machine protection settings. Needs OP training afterwards …
  - Risk of beam dump due to long running sums RS12.

- MD#2065 and #2066 Emittance exchange with linear coupling: Class B but proposed to limit to 12 bunches → presentation
  - … as the MD can potentially be lossy
  - Wire also only 10 b @ 6.5 TeV !?
  - 2065 emittance exchange with one nominal per beam

- MD#2154 PPLP fast ramp: Class B
  - New ramp, pilots only, collimators coarse settings

- MD#2158 B4 correction and feed down: Class B
  - Pilots – like commissioning

MD#2 2/2

- Beta* reach, aperture @ 30 cm: Class B
  - Long discussion, does not fit anymore in present commissioning.
  - Collimators to go to standard coarse settings
  - If more than pilots needed → needed for asynchronous dump test ? → Class C ?

- MD#2183 Calibration of diamond BLMs at TCDS: Class C
  - What is the difference relative to last year (besides sign of bump ;-)

- MD#2197 BTF: Class C – but done before
  - Reduced crossing angles, TCTs to follow etc.

Spare MDs

- MD#2050 RF controlled emittance blow-up: Class B
- MD#2157 Beam Quality preservation: Class B
- MD#2162 Dynamic aperture at 6.5 TeV: Class B-C
- MD#2179 Off-momentum halo at injection
- MD#2190 Q’’Stabilisation during injection