Meeting of the restricted Machine Protection Panel

MD block 5

October 11th, 2024.

Participants:

Belen Salvachua, Christoph Wiesner, Daniel Wollmann, Pascal Hermes, Carlo Emiolio Montenari, Stefano Redaelli, Anton Lecher, Jan Uythoven, Benoit Salvant, Georges Trad, Cedric Hernalsteens, Joanna Wanczyk.

The slides of all presentations can be found on the <u>website of the Machine Protection Panel</u> and on <u>Indico</u>.

MD9546 - B1 collimation quench test with protons (C. E. Montanari, P. Hermes)

This MD will follow the same structure as the quench test MD for B2 (MD7224) for which a report is available on Indico.

The final procedure must be uploaded to ASM, detailing all steps to be taken during the MD Besides this, aspects on the filling scheme, the BLM thresholds, the collimator temperature interlock and the ADT setup have to be clarified.

The rMPP will reconvene on Wednesday 16th October to review the MD.

rMPP comments on MD13523 (Measurements for improvement of intensity dependent correction)

The details of the MD have been discussed in the rMPP meeting for MD blocks 4 and 5.

Georges confirmed that 8b4e beams will be used; with multiple bunch intensities and configurations with 1 or 2 batches.

As this will be the first time that high intensity 8b4e beams will be used in the LHC this year, the heating effects have to be carefully monitored. Benoit confirmed that he will follow the heating evolution online and perform the needed checks as done for the intensity checklist during ramp-ups and to go beyond 500b for scrubbing.

In addition, the SPS BQM must be adjusted to ensure that the injection bunch length is not lower than 1.2 ns. In addition, the bunch length in the LHC must be monitored during the MD and the beams will be dumped in case it gets below 1.2 ns.

Joanna and Georges confirmed that the MD procedure will be updated accordingly (heating checks, SPS BQM, exact number of bunches).