

An OMC perspective on the commissioning (20' + 10')

Thursday, November 25, 2021 11:40 AM (30 minutes)

In the beginning of Run 2, the betawas *80 cm* and it was gradually squeezed down to finally reach *25 cm* in 2018. In Run 3, the goal is to reach a beta of 30 cm already during the first year, which poses a series of challenges as to commission several production optics in the start-up. In Run 2 it was demonstrated that coupling control was critical for beam stability and luminosity production. Furthermore the correction of non-linearities was fundamental to enable accurate linear optics corrections. In this talk, we outline the plans for linear and nonlinear optics corrections needed to guarantee safe machine operation and to deliver design luminosity to the experiments. This talk also presents the plans and newly developed methods to correct coupling, explaining the improvements in tools, setup and methodology to further improve the corrections and the efficiency of the commissioning. Finally, a short summary of the observations during the 2021 beam tests is presented.

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