

Cleaning and collimator operation - outlook

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Abstract

An overview of the collimation system performance during 2012 is presented.

The collimator "tight" settings for the 60 cm beta* reach are introduced and the cleaning inefficiency achieved throughout the year with one single collimator alignment is presented. The performance of the semi-automatic collimator alignment tools is also discussed, taking into account the commissioning experience at the LHC and the latest results from SPS beam tests with a collimator prototype with integrated BPM buttons. We investigate the beam losses through the cycle and their sharing between IR3 and IR7, with emphasis on the yearly evolution of the losses and on the measured instantaneous beam lifetime in critical phases of the operational cycle. This is used as input to estimate collimation performance reach after LS1. The baseline settings strategy for the startup in 2015 is also presented.