

Optics model

The LHC optics quality after the 2015 commissioning is reviewed. Optics corrections were limited due to a variety of problems. This includes disturbed dispersion measurements due to orbit drifts and an unexpected shift of the IP beta-function waist. The resulting issues will become more critical the smaller beta-star of 40cm foreseen for 2016. Therefore, an improved optics correction strategy with desired actions for the 2016 commissioning is proposed. We present the optics quality during combined ramp and squeeze and discuss the benefits of ballistic optics measurements. The optics stability over time and the correction of interaction region (IR) non-linearities are also discussed.