

Collimation System Optics

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The very high stored energy in FCC-hh beams is a source of concern for machine protection when even small fraction of the beam could represent a potential danger in case of losses. In order to ensure machine protection by beam cleaning for both betatronic and synchrotronic movements, collimation sections are inserted in FCC-hh lattice. Optics of these sections, designed and optimised for FCC-hh, are presented here. Lattice sequences, including collimators layout have been optimised for both betatron and momentum collimation, according to different options under study for Long Straight Sections layout.

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