



Fast losses induction

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The tune kicker combined with the ADT

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MD REQUEST

Aim:

Finding a method for a UFO-timescale loss induction faster than the ADT sign flip method excitation which produced losses about 8 times longer than required

Method:

Combination of the tune kicker with the ADT excitation

*Crucial for the
UFO Quench Test*

Requirements: the same as during the ADT fast losses test (22.06.2012)

Time: 4 hours

Beam: 2

Energy: 450 GeV & 4 TeV

Intensity: 1 pilot bunch / 10x pilot bunch

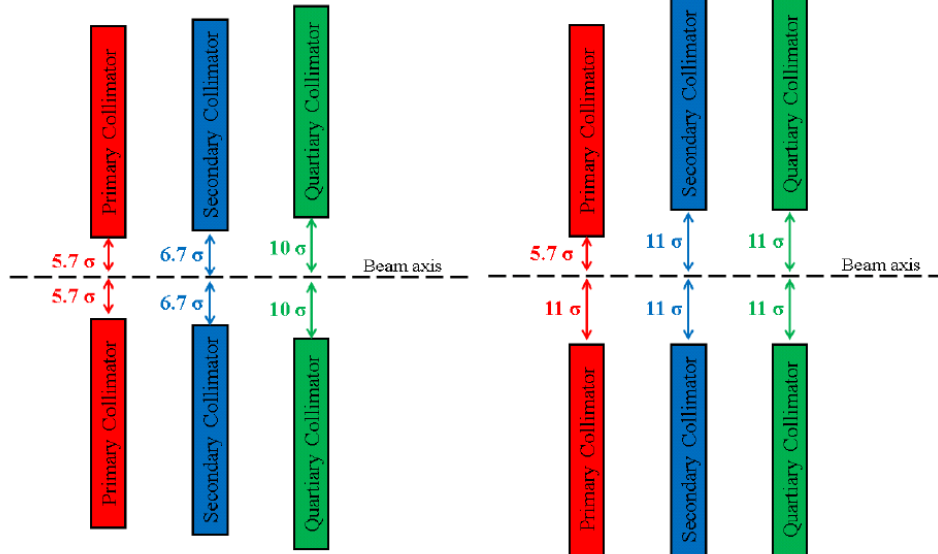
Target: Collimators (TCP)

+ check the loss temporal distribution with lower emittance bunches

+ if we have time: check how the losses depend on the collimator jaws positions (for the synchronization of the ADT excitation and the bump size purpose)

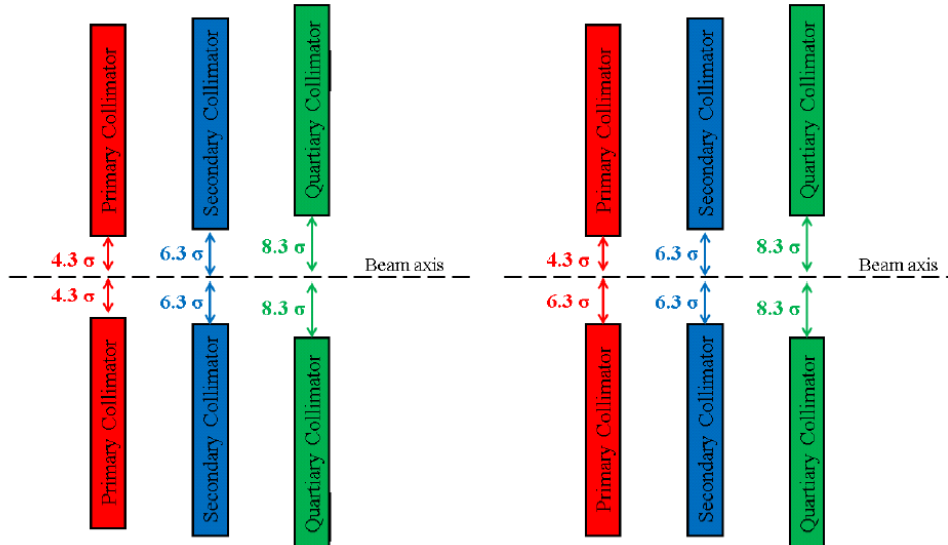
Nominal position of collimator jaws at 450 GeV

Applied position of collimator jaws at 450 GeV (B2)



Nominal position of collimator jaws at 4 TeV (IR7)

Applied position of collimator jaws at 4 TeV (IR7)



No unexpected behavior of the beam occurred during the ADT fast losses test (MD#2).

We would like to apply the same configuration of the collimator jaws for 4 TeV test as during the 450 GeV experiment (5.7σ and 11σ).