

Action items - LHC Collimation Study Group

2011.05.02

- Provide budget of space available for the cryo-collimator and the new 11T dipoles including all auxiliary installations inside the cryostat (MK)
- Determination of quench limit for the new 11 T dipole taking into account the heat evacuation from the coils
- Tests to finalize integration of two 11T dipoles and the cryo-collimator in a common cryostat. A prototype of the full cryostat is needed before production can be approved.
- Estimation of long-term radiation damage to the 11T dipoles close to the cryo-collimator.
- Studies of the effect on not having the DS collimator at the max of the beta function.

2011.04.11

- Clarify which horizontal loss maps showing a hierarchy breakdown were done after having done a vertical loss map first (collimation team) . For future loss maps, keep the same sequence: first horizontal than vertical loss maps.
- Calculate margins for van der Meer scans at 7 TeV, nominal optics

2011.04.04

- Strategy for assessing the BLM response, necessary for LHC intensity reach calculation:
 - Estimate the impact distribution on the TCP during the crossing of the 3rd order resonance.
 - Run SixTrack simulations with this initial distribution.
 - Provide FLUKA team with starting distribution and SixTrack output. FLUKA simulations will then estimate the BLM responses, which can be compared to measured loss maps.
- Define failure scenarios with direct on beam impacts on the TCTs that should be studied (energy, emittance, impact parameters)