



PhD Topic: Identification of LHC beam loss mechanism

A deterministic treatment of loss patterns

- Regular Losses (nominal operation)
 - Due to collimators: only place where all losses should theoretically appear;
 - Due to intrinsic beam characteristics: scattering, beam-beam interaction...
- Accidental Losses
 - Failure scenarios
 - Error scenarios
- Aim of the PHD:
 - Study loss patterns (from BLM signal) and find their origin
 - Use simulation of proton loss location (global scale) and shower development (local scale) to enable measurement interpretation. Lots of DOF...



Currently: magnet quench on 2008/08/09, 00:19:51 (aperture scan)

- Goal: see if simulations can predict the observed loss locations.
- Proton loss simulation?
- Do they show the same behaviour as the real quench data?
- Second quench: 2008/09/07, 15:34:05