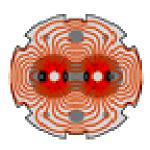
## **LHC Machine Protection Review**



Contribution ID: 16 Type: not specified

## Magnet powering system and beam dump requests

Tuesday 12 April 2005 16:00 (20 minutes)

The objective is to safely extract the beam after quenches and failures in the powering or quench protection system. Failures could be detected by different systems, depending on the origin of the failure. The role of quench protection system, power converters and powering interlock systems will be discussed. Timescales for the extraction of the beams after different failure cases will be presented. Monitoring mechanisms to detect fast magnet current changes in critical electrical circuits will be addressed as a complement to the machine protection systems being presently in the baseline. This system will initiate the extraction of beams before the magnetic field in the magnet changes in a significant way. Combined failures could be equally covered by such a system, for example after a power cut due to thunderstorms.

**Author:** Dr ZERLAUTH, Markus (CERN)

**Presenter:** Dr ZERLAUTH, Markus (CERN)

Session Classification: Equipment and beam monitoring - connected to the beam interlocks

Track Classification: Equipment and beam monitoring - connected to the beam interlocks