

MPP meeting 12 November 2008

Preliminary agenda:

- SPS ring and extraction interlock system modifications for 2009 (J. Wenninger)
- LBDS commissioning summary (B. Goddard)

Present:

Stefano Redaelli, Etienne Carlier, Brennan Goddard, Bruno Puccio, Jorg Wenninger, Jim Strait, Jan Uythoven, Ben Todd, Laurette Ponce, Markus Zerlauth, Alick Macpherson, Mike Lamont, Bernd Dehning, Reyes Alemany, Daniela Macina, Mike Koratzinos

Minutes:

News

Joerg: The meeting will hopefully find a permanent time: Friday at 10:00; Joerg will give a report in MAC on 27 November.

SPS and extraction interlock modifications for 2009 (Joerg)

- Bend crystal (to be operated only in safe beam) to be installed in LSS5.
- Protection against PC errors: Five more channels.
- Beam Quality: all important beam parameters should be surveyed. No fast instrumentation is available for transverse emittance measurements.
- The RF BQM (RF beam quality monitor) will survey bunch position, length and intensity spread; it does not survey absolute intensity.
- The Fast BCT will survey absolute (and relative) intensity. Its integration time is 25ns, it cannot detect ghost bunches. "Test" interlock exists. Located in BA3. Old BTC interlock in BA4 will be removed.
- Concerning the experiment injection inhibit, the question was raised if the interlock should be made maskable in case it is 'transferred' from the LHC injection BICs to the TI2/TI8 BICs?
- ROCS: currently mask signal manually.
- BIC controls: difficult to do analysis if do not know exact extraction time. Two solutions: move to SPS timing (preferred) or have the SPS extraction timing marker added.
- Will the SPS extraction timing marker be available for all extraction BICs? Answer is yes, all BICs will be the same with latest firmware

Joerg will report on SPS incident in the next meeting (beam lost in vertical plane – in horizontal plane there is an all-analog system apparently very reliable).

The fast tail scraper system is under revision. For next year, current system will be used.

Beam dump commissioning (Brennan)

- Status: A lot of progress, still things to be done.
- Kickers: no problems so far, dilution is on.
- Aperture for extracted beam: only a limited amount of measurements before Sep 19 exist.
- XPOC system (external post-operational checks for the LHC beam dump): measured and calculated sweep in good agreement, work is in progress.
- All interlock tests will need to be repeated next year. Better organization will be a bonus. We do not yet have a method of how to enforce tests after changes.
 - BIS failures: will do in the lab by injecting noise
 - TCDQ: Synchronized movement not yet ready; TCDQ temperature interlock is in place.
- A machine protection logbook would be a good idea. Either one logbook with tags or several logbooks.
- The first emergency dump was triggered on 11 September around 22:30.
- Work needed from beam PM to make easy interface and analysis (together with XPOC) possible synergy with PM tool (Vito).
- Fault statistics: No asynchronous (with RF) dumps so far. Will collect and publish statistics before 2009.

Next meeting

On 5 December.