



Period report (June 25 – July 2)

- General overview
- Spectrometer problems
- Statistics



General overview

- Run taken: +41, -43
- Run schedule :
 - Up to Sat 8:00 : Scrubbing run
 - Sat 8:00 – 16:00 : PS injector problem (8h lost)
 - Sat 17:00 – 22:00 : Machine restart (5 hrs for full beam)
 - Sat 22:00 – Sun 5:00 : Spectrometer restart
 - Since Sun 5:00 : Stable beam, only 2h lost Monday
 - MD : Thu 10:00 – Fri 10:00
 - Restart : Fri 12:00
- Beam
 - Very stable, $I(p) > 120 \times 10^{11}$ up to 138! Mu-flux $> 2 \times 10^8$
 - Total time lost : 20h
 - SPS : 10h (8h Sat + 2h Mon + 2h various+1h Fri)
 - Machine restart : ~7h Sat + 1h Friday
 - New beam setting since Friday (2004-prime, file M2-xx)
- Target
 - Microwave reversal on Mon, Jun 21.
 - Constant high polarization : +53, -51



Spectrometer – main issues

- Straws
 - Many trips, mainly in late afternoon (everyday)
 - HV decreased on few planes
- RICH
 - Many trips: PD0, PD2, PD4, PD6 (since Sunday)
 - Few channels unavailable for 1 to 2 days
 - Hope that the 2004' setting will help
 - Since today: all channels up,
- DAQ
 - Sometimes run stops, or does not start
 - Not clear why
 - Few pccorbXX reboots due to spill mismatches, etc...



Spectrometer – hard/soft incidents

- Logbook
 - Logbook unreachable - Pccoeb03 server disk crashed (Sat Night)
- BMS
 - BMS-5 missing - NIM PS exchanged (Sat Even)
- Veto/Trigger
 - IV rate increased - Crate 422R03 PS found off (Sun Night)
 - Pure HCAL trigger 50% less – Due to larger HCAL threshold (Sunday)
 - Larger OT found – Matrix reloaded (Fri Day)
- Silicon
 - Plane 1U/1V off for several shifts – repeater card exchanged (Sat...)
- MW1
 - 4 planes found half empty – LV module restated (Sun Even)
- CATCH
 - 2 modules (MM and MW2 died) (Sun + Mon)
- ECAL2
 - HV tripped – restarted (Thu Day)
 - Since long stop – position changed, re-measured (Fri): OK
 - HV off for 32 channels – need few hours to repair



Work during MD (Thursday)

- MM
 - Noisy SFE16 card on MM-1X exchanged
 - Noise on MM-2V improved
- Straws
 - Thresholds re-optimized
- Trigger/Veto
 - HV on few channels increased
 - Veto-Inner moved by 2 mm,
- RICH
 - Cabling on BORA card improved
- GEM
 - GEM10 missing channels – detector to be replaced?
 - Move it out with a MWPC chamber – to do Monday



Various

- New features
 - DAQ : Cinderella filter on: since Sun Night
 - (saves 20% of tapes spending)
 - But few problems found, some time lost
 - ECAL2 : SADC under test (pccorb17 excluded)
 - RICH : Additional CAEN HV crate (1527), new gas PC
 - DCS : Gas mixtures now monitored
- Alignment
 - 2 times : Monday, Friday afternoon
- ECAL
 - Position runs taken (Friday)



Statistics

	hrs	%	
Number of hours in a week	168,0		
SPS scrubbing run (hours)	16,0		
SPS long MD	24,0		
Total SPS time scheduled	128		
PS magnets problem (hrs)	8,0		
SPS Monday morning effect	2,0		
Short stops	2,0		
SPS restart Saturday June 26	5,0		
SPS delay + restart Friday July 2	2,0		
Total time lost	19,0		
Useful SPS beam (hrs)	109,0	85.2%	
Spectrometer restart (not nominal beam)	8,0		
Target reversals	7,0		
Alignment runs	2,0		
Calibration runs, beam settings	6,0		
Various losses	4,0		
Total number of physics runs	84,7	81,9	75,1%