

Minutes from the last meeting emittance meeting 11.09.2012

Guido Sterbini, talk attached, notes:

1. example:
 - a. beam intensity $6e11$ ppb, Ebeam = 60 MeV
2. PM charge vs Gain [V] - should follow power
3. linearity region 700-800 V: saturation 50%
4. sigma beam 5-10 mm
5. above 850V - sigma decreases with gain
6. these functions are intensity-dependent
7. need to work about 50% of saturation - otherwise noise affects the fit
8. good is to work at about 80%
9. position of peak is very sensitive to the saturation

Below the status of the task defined 31.01.2012

1. Synchronous measurements piloted by the LHC: --> lower priority with respect to other topics in this meeting. **LS1**
2. Saving all parameters to the Dbase to allow full postmortem analysis. **done for LHC beams, PS, PSB; LHC; , SPS missing**
3. The application should then be able to retrieve the Dbase data as if it was a new measurement, but not store it again. **Not done LS1**
4. Are the fit routines we presently use correct or do we need other Front end fit routine versus application fit routine. **LINUX needed, LS1**
5. Bunch-by bunch measurements SPS: **Done, missing 414 (new electronics needed), 521 repair,LS1**
 - a. **the 25 ns operation will have significant crosstalk between adjacent bunches**
6. Bunch-by bunch Prospects for PS: **cable will be installed**
7. PM and filter setting strategy
 - a. Is the setting strategy for filter and HV already developed? --> **no, the data to make the study is available, but the strategy is not yet developed.**
 - b. How will this be implemented? **To be defined.**

Discussion:

1. It was felt that a simulation study of the signals in the scintillators is needed for a better understanding ,longer term investigation in BL
2. The question concerning different calibration are used for the in and out scans was answered with yes for all scanners
3. Optimal operation range for scintillator and PM system
 - a. Both limits should be given, low and high
 - b. LHC analysis of LHC data is ongoing
4. Blowup studies for PSB o be discussed with Federico
5. Request for a second set of scanners in the PSB, Bettina
6. 20m/s not correctly calibrated: **investigation in LS1**
7. PSB low energy beam size to large for available scale, **LS1 action**