SPS Test Beam Plan

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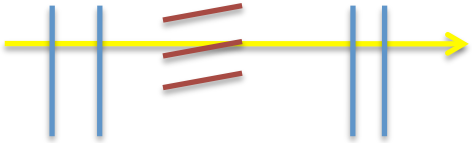
Main Phases

	Configuration	Description	Amount of Data Needed
1)		• Get System Working • No B-Field • Alignment for strips	As many as necessary to get system under control
2)		• Use the best plane as determined by 1) • Tilted to ~10 degrees • Alignment with PLT	~100k events
3)	Same as 2)	• Take data with B field to measure Lorentz smearing • Different field values: +3T, +2T, +1T, then -3T, -2T, -1T, finishing with 0T	200k at +- full 100k at +-1, +-2 200k at 0
4)	Same as 1)	• Measure spatial resolution with charge sharing	1 million events

Expected Data Rates

What's the beam cycle duration ?

The beam cycle is defined for the SPS machine in order to service all users: Fixed-Target, CNGS, LHC.
Typical configurations:

Cycle length	Flat top (fixed target)	Users
16.8s	4s	SPSNA
43.8s	9s	SPSNA+3CNGS+LHC
14.2s	4s	Ions

Duty Cycle: 20%

- Expect readout can handle at least 100 Hz (pessimistic)
- 90,000 events per hour
- Full program as previously described lasts ~23 hours

Questions

- B-field orientation? Max field (+ and -)? Ramp time?
- Distance from counting room to setup?
- Can we go in earlier to setup? If not in the beam line, can we go to the counting room?
- Remaining paperwork? Safety inspection?