TWIST Analysis Meeting

8 and 9 June, 2001

The purpose of this meeting is to make plans for the efficient use of the commissioning data. Our short-term goal is to make concrete progress in our understanding of the TWIST spectrometer. In general we need to know both the as-built characteristics of the detector, and the sensitivity of our analyses to these characteristics.

We need to make progress on the above with MC prior to the availability of beam. In the case of those items requiring a field, beam data will be available later. In any case, the MC tests should be fully developed before beam data is available.

I want specific commitments from people as to what they will accomplish on a specific time scale. These commitments must be taken seriously.

This is not intended to be a software meeting. Therefore, the status reports are expected to be brief so that everyone has a feel for the status of the tools. Details can be fleshed out in small group discussions, or through postings.

Friday, June 8

9:00 AM	Introduction	Nate	
9:15 AM	First guess code	Jim	
	Helix tracking		
9:30 AM	Kalman	Konstantin	
10:00 AM	Fitting procedure	Valpo	
10:15 AM	Coffee		
10:30 AM	Garfield	Roy	
10:45 AM	Time zero	Sun-Chong	
11:00 AM	Geant: TWISTGeant and M13Geant	Peter	
11:15 AM General discussion re: alignments (of wires, planes, stack, and magnet			
What can be done with histogram-level MC?			
	What can be done with tracked helices from digitized MC?		
What have we / can we learn by tracking MC straight tracks?			
How many straight tracks do we need?			
	Who will do what, and by when?		
12:00 PM Lunch			
1:30 PM General Discussion: Response			
What can we learn re: angular dependence			
What can we learn re: energy dependence			
	MC? Data?		
2:30 PM Energy calibrations			
3:00 PM	Coffee		
3.30 PM	Follow-up discussion		

- 3:30 PM Follow-up discussion
- 4:00 PM Working groups

Saturday, June 10

Discussion of Priorities, and of what we can hope to learn from the commissioning data, and of what we should do with the MC.

Joblist: Beam data

Who?

Time zero - both with and without field DTR optimization - both with and without field Chamber offsets - straight tracks only? Wire map - straight tracks only? Stack and field alignment - helices only Resolution - both with and without field Efficiency - both with and without field Response vs. Angle - both with and without field Response vs. Energy - helices only; ... can we use straight-through positrons with differing momenta?

Digitized Data

All of the above - same person. Absolutely necessary.

Other MC

Energy calibrations - digitized data Beam tunes, beam backgrounds? How do we calibrate the beam momentum?