

Temple Review Post-Mortem

Hal Evans

- 12-15 Aug: Director's Rev. of all CDF & DØ Run IIb Projects
 - Prep for DOE (Lehman) review: week of 23 Sep.
 - Reviewed: Technical Aspects / Cost & Schedule
 - Technical Committee Members
 - L.Bauerdick*, F.Forti, D.Marlow*, J.Pilcher**, M.Selen*, H.Sadrozinski, H.Tajima
- Review went well on all fronts (thanks!)
 - New Tevatron Run IIb baseline
 - $L = 4 \times 10^{32} \text{ cm}^{-2}\text{s}^{-1}$ & 396 ns bunch spacing
 - Documentation basically ok
 - need more on Basis of Estimate
 - Technical side also sound. Only 2 recommendations:
 - “The proponents should try to characterize the performance of the upgraded system with a few global figures of merit. The PAC has emphasized the Higgs detection significance.”
 - “This task appears ready to baseline.”

Schedule to Lehman

Week of	Tasks to Finish
Aug 19	• Final changes to schedule by groups • Submit note of adequacy of L2 & L3 processing power
Aug 26	• 1st draft of responses to review circulated • Revise TDR (mainly simulation for L1Cal) • Final Project Management Plan
Sep 2	• Schedule Frozen (except for BOE changes) • TDR to internal DØ editors • Final draft of responses to review
Sep 9	• Final TDR version complete • Practice talks • All Lehman Review material posted to web (9/13)
Sep 16	• Committee reads documentation
Sep 23	• Lehman Review

What We Need to Do

- **Fill holes in Schedule Basis of Estimate**
 - see L1Cal Web → Documents → Administratia
- **Address Technical Committee's comment**
 1. **Increase in Higgs sensitivity wrt current trigger**
 - $ZH \rightarrow \nu\nu b\bar{b}$ (& $H \rightarrow \tau\tau$???)
 2. **High Pt trigger menu with rate comparisons**
 - probably too ambitious
 3. **Other suggestions ???**
- **Double-check rate numbers**
- **Compare Data vs MC for current conditions**
 - see Josh Kalk's numbers
- **Update TDR with new simulation results**
 - Jet Algorithm new eff. vs rate plot(s)
 - EM Algorithm nothing here?
 - Tau Algorithm new eff vs rate plot
 - ICR nothing here?

Data vs MC Rates (now)

	Data		MC QCD5
Trigger	$L = 15\text{e}30$	$L = 20\text{e}30$	$L = 18\text{e}30$
cem(1,5)	600	800	675±25
cem(1,10)	38	50	55±7
cem(1,15)	8.1	10.8	12±5
cem(2,5)	27	36	38±6
cem(2,10)	1	2	3±2
cem(1,5)cjt(2,5)	52	70	62±10
cem(1,10)cjt(2,5)	12	16	17±5
cem(1,10)cjt(2,7)	7	9	10±4
cem(1,15)cjt(2,7)	3	4	4±2
cem(1,10)cjt(2,10)	9	12	5±3
cjt(2,3)	912	1225	650±25
cjt(2,5)	54	72	70±10
cjt(3,5)	10	13	13±4
cjt(3,7)	2	3	4±3
cjt(4,5)	3	4	1.5±1.5
cjt(4,7)	0.6	0.8	0