



Agenda

Fermilab PMG

DZero Silicon Layer 0 Proposal
October 14, 2003

- Introduction (Kotcher - 5')
- Overview of Silicon Layer 0 Project (Lipton - 25')
- Mechanics & Installation (Fast - 20')
- Electronics & Readout (Nomerotski - 20')



DZero Run IIb Rebaselining

- Deep disappointment in Director's decision to terminate silicon detector, formal response being drafted
 - ◆ Requests for Lab support also in preparation
- Those involved in the trigger and DAQ/Online projects remain strongly committed to seeing through their designs, implementing the improvements to the DZero trigger systems they've devised
 - ◆ Motivation for the trigger, DAQ/Online is still relevant as luminosity increases
 - ▲ Base (design) accelerator projections reach peak instantaneous luminosities of 1.6 (2.9) E32, well pushes the limit of our current system
- While by no means a substitute for the upgraded Run IIb silicon, Layer 0 offers palpable improvements, provides a hedge against inner-layer radiation damage
 - ◆ Maintain pattern recognition, enhance impact parameter resolution
 - ◆ Technical issues resolved very quickly, project has coalesced
 - ▲ Draft Conceptual Design Report, resource-loaded schedule in place
 - ◆ Critical mass of personnel assembled - interest is there



Run IIb Project Organization

Oct '03

Silicon sub-project under reconsideration to accommodate Layer 0

DO Run IIb Project
J. Kotcher, Project Manager
V. O'Dell, Deputy (Trigger/DAQ); R. Lipton, Deputy (Silicon Layer 0)
W. Freeman, Associate, M. Johnson, Technical Coordinator
D. Knapp, Budget Officer; T. Erickson, Administration

WBS 1.1
Silicon
M. Demarteau
G. Ginther

1.1.1 Sensors
R. Demina, F. Lehner

1.1.2 Readout System
A. Nomerotski, E. von Toerne

1.1.3, 1.1.5 Mechanics & Assembly
W. Cooper, K. Krempetz

1.1.4 Production
J. Fast

1.1.4 QA, Testing, & Burn-in
C. Gerber

1.1.6 Monitoring
M. Corcoran, S. de Jong

1.1.7 Software & Simulation
D. Buchholz, E. Shabalina

1.1.8 Administration
(M. Demarteau)

WBS 1.2
Trigger
P. Padley
D. Wood

1.2.1 L1 Cal Upgrade
M. Abolins, H. Evans,
P. LeDuc

1.2.2 L1 Cal/Track Match
K. Johns

1.2.3 L1 Track Trigger
M. Narain

1.2.4 L2 β Upgrade
R. Hirosky

1.2.5 Silicon Track Trigger
U. Heintz

1.2.6 Simulation
M. Hildreth, E. Perez

1.2.7 Administration
(D. Wood)

WBS 1.3
DAQ/Online
S. Fuess
P. Slattery

1.3.1 Level 3 Systems
D. Chapin, G. Watts

1.3.2 Network & Host Systems
J. Fitzmaurice,
S. Krzywdzinski

1.3.3 Control Systems
F. Bartlett, G. Savage,
V. Sirotenko

1.3.4 DAQ/Online Management
(P. Slattery)

WBS 1.4
Project Administration

WBS 1.5
Installation
R. Smith

1.5.1 Silicon Installation
Mechanical:
H. Lubatti
Electronics:
L. Bagby, R. Sidwell

1.5.2 Trigger Installation
D. Edmunds

Adjustments continue to be made...