



MINOS Update

Presentation at the MINOS Collaboration Meeting
Cal Tech
January 5, 2002

Stanley Wojcicki
Stanford University
Stanford, Ca



Outline

- MINOS Status Today – quick overview
- Key Issues in front of us
- Decisions that need to be made
- Comment regarding Proton Source



MINOS Progress and Status

- NuMI Rebaseline – approved
 - Office of Science approval November 19
 - Approval by Deputy Secretary in December
 - We owe thanks to Ron Lutha for hard work
- Far Detector Installation – going well
 - 77 planes up as of December 13
 - 4 crates being read out
 - Lots of data being generated



Progress and Status (ctd)

- Conventional Construction at Fermilab
 - TBM excavation completed on December 8
 - Some Drill and Blast needed before installation of the beam pipe can commence
 - Healy out by end of August (?)
- Beam Technical Components
 - Much Progress on finalizing the design
 - Need more help from the Collaboration



Progress and Status (ctd)

- Calibration Detector
 - Data from last summer being analyzed
 - Next run scheduled for T7 beam line in June; another in T11 in the fall
- Near Detector Assembly
 - Pre-purchase review in December
 - Lots of stuff in New Muon Lab
 - Ready to start surface assembly



Proton Intensity

- Proton Intensity Working Group formed
- Joint NuMI/MINOS – Beams Division
 - Doug Michael and Phil Martin, co-chairs
 - Peter Lucas, Tom Fields, Alberto Marchionni
 - Stan Pruss, Eric Prebys
- The group will define a “road map” towards achieving planned intensity
- The report is due April 15



Neutrino Beam Issues

- Beam Specifications Advisory Group (BspAG) formed previously – A. Para, chair
- Close connection with commissioning issues
- Need to act on some of the recommendations at this meeting; time is getting short
- Many tasks (see Aesook's list) could use additional manpower from the Collaboration



Data Taking and Analysis

- Jeff Nelson appointed Run Coordinator
- Will coordinate various demands on the data acquisition system: detector checkout, debugging, calibration, physics, etc.
- Time to start putting together simulation, calibration, reconstruction efforts -> physics
- Atmospheric neutrinos and cosmic rays - initial physics topics



Hadronic Production Experiment

- P907 received first stage approval from Fermilab management
- No new news from CERN re proposal there; maybe in April
- P907 will generate some competition for resources with NuMI
- Need to decide how to proceed



Issues to be Decided

- Near Detector Muon Spectrometer – do we multiplex (electronics procurement issue) ?
- Possible beam pipe extension into the chase
- Semi ME and HE beam options
- M64 Capacitors
- June Meeting – do we want to change the date (conflict with CalDet run)?
- Phone Meetings format – elimination and/or combining some of the meetings (data, reconstruction, calibration, physics)



Proton Driver

- Fermilab has expressed new interest in a high intensity proton driver (backup option)
- Both a synchrotron and linac options are being considered
- Accelerator study has been initiated (time scale is middle of April)
- Lab wants to identify 3 strong physics justifications (neutrino oscillations is one)
- Possible timescale is 2008