Shutdown Status and Plans Hermes

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January 12 2001

- Present Shutdown Status
- Status of Transverse Magnet
- Plans until June
- Startup

Present Shutdown Status

- Lumi Monitor Repaired.
- Hermes moved to Park Position.
- Magnet Chambers Repaired.
- Magnet chamber re-installation starts January 22.
- Target Deuterium-Hydrogen switch has started.
- Presently on Schedule.

Hermes Next Steps

- Re-install Magnet chambers. Jan. 22
- Re-install Back Drift Chambers. Jan. 29
- Re-install RICH. Feb. 12
- Tune/Calibrate target. Jan. - Mar.
- Install/Remove $\Lambda-$ Wheels. March
- Prepare for Move to Beam Position. 27.03.01

Transverse Magnet Status

- Design of Iron Yoke finished and submitted to the workshop.
- Copper coil order placed Dec 18th.
- New power supply located.
  - Installation req. under investigation.
- Order for improved water supply OK.
- Pole tip design not yet final!
- **Magnetic design still on critical path.**

Transverse Magnet Status

- Present Field Strength 0.33T - Optimum.
- Uniform over +/- 180 mm.
  - 20 percent loss in Luminosity.
  - Simulation work continues.
- Design Cobalt Steel pieces next week.
- Design Last piece of pole shoe early Feb.
- Work will proceed in parallel.
- No extra time left in plan.

Machine Start up

First Thoughts on Upgrade Recommissioning

Start up ➔ -2 weeks per ring =**4 weeks** ==> Sum = 4 weeks
with detectors turned off
Rotators N, S flat (on in the East)
-First turn steering, beam, store beam, correct orbits
-Checking new and old components with beam
-Check out diagnostics, beam dump, quench protection, bpms, SR monitoring, temperature monitoring

Explore optics and aperture, ➔ 1 week per ring =**2weeks** ==> Sum = 6 weeks
with detectors turned off
Rotators N, S flat (on in the East)
Extensive studies in both rings at several energies
Aperture scans

Turn on detector fields, ➔ **3 weeks** ==> S = 9 weeks
Learn how SC magnets are behaving,
Learn ramping with corrections for motion of S.C. magnets,
remeasure optics,
learn how to decouple the machines

Collide beams, ➔ **2 weeks** ==> S = 11 weeks
-optimize machine parameters (orbit, beam height, working points etc)
-explore optimum luminosity parameters
-luminosity scans

Investigate Synchrotron Radiation, ➔ **2 weeks** ==> S = 13 weeks
-Study beam position and SR positions in the IR
-Test special correction procedures including the bridges

Perform luminosity (days) ➔ **4 weeks** ==> S = 17 weeks
-Runs with exp.'s on to check on backgrounds

In parallel: Tune Polarization for HERMES in dedicated shifts (nights)
With ZEUS/H1 solenoids down N S Rotators flat (HERA-B running possible)
(a) During days, b) at nights? Ramp down/up solenoids frequently?)

Turn on south/North rotators, ➔ **2 weeks** ==> S=19 weeks
Orbit, optic check,
Set up luminosity

Luminosity running ➔ **8 weeks** ==> S=27 weeks
with frequent machine studies
To set up polarization with detector fields on
(Start with detectors off, ramp them up bit by
bit, retune....

Goal: Start normal running with long. Polarization at N,S,E in January 2002.

Start up Plans

- Status during start up: June - Sept.
  - Spectrometer magnet OFF.
  - Target magnets ON for tests.
  - No Shifts
- Install Λ–Wheels 17.09.01
- Start Data Taking 20.09.01
  - Start Shifts 20.08.01 ?