Status Report for HERMES

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Outline

- Changes to the Experiment
- Background conditions
- Requests to HERA

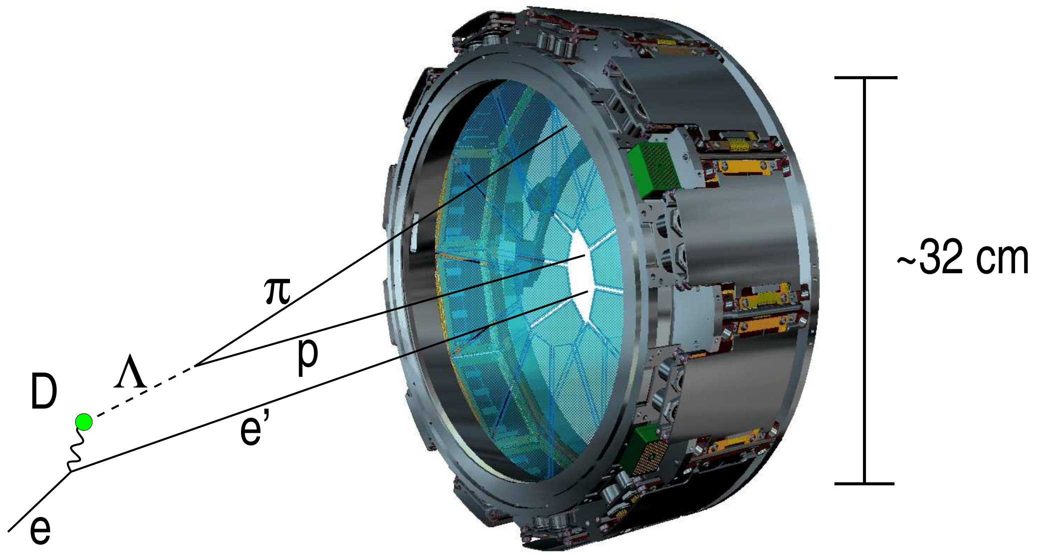
Changes to the Experiment

- Turn on of the Beam Loss Monitor.
  - Fully functional but not connected to the Dump Kicker.
  - Triggers at all positron injections, working on their suppression.
  - Upto now few triggers at positrons at 27 GeV.
- Installation of the Lambda Wheel.
  - Installation in March 2002.
  - All 24 Silicon Detectors are functional.
  - Commissioning in progress.

Lambda Wheel

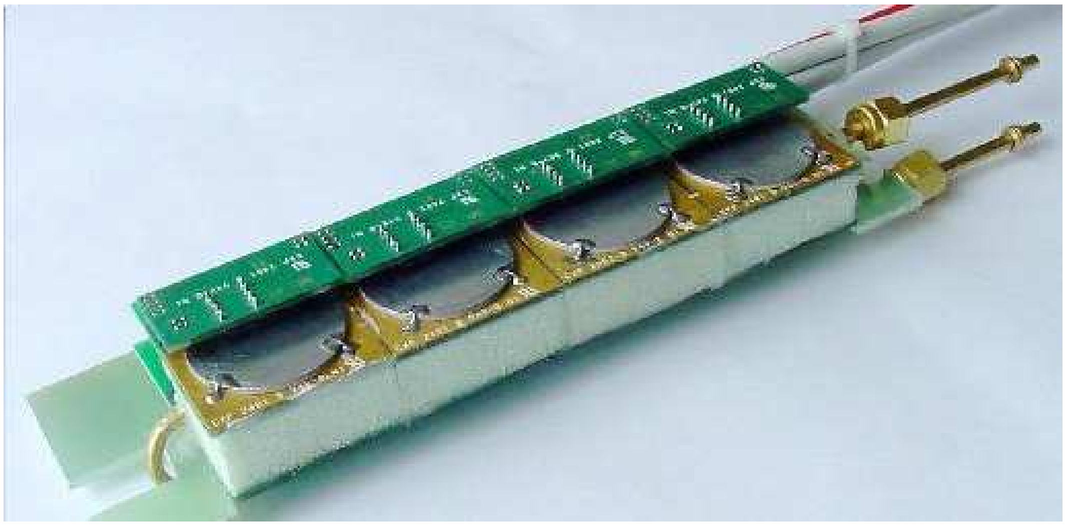
Physics Goal:

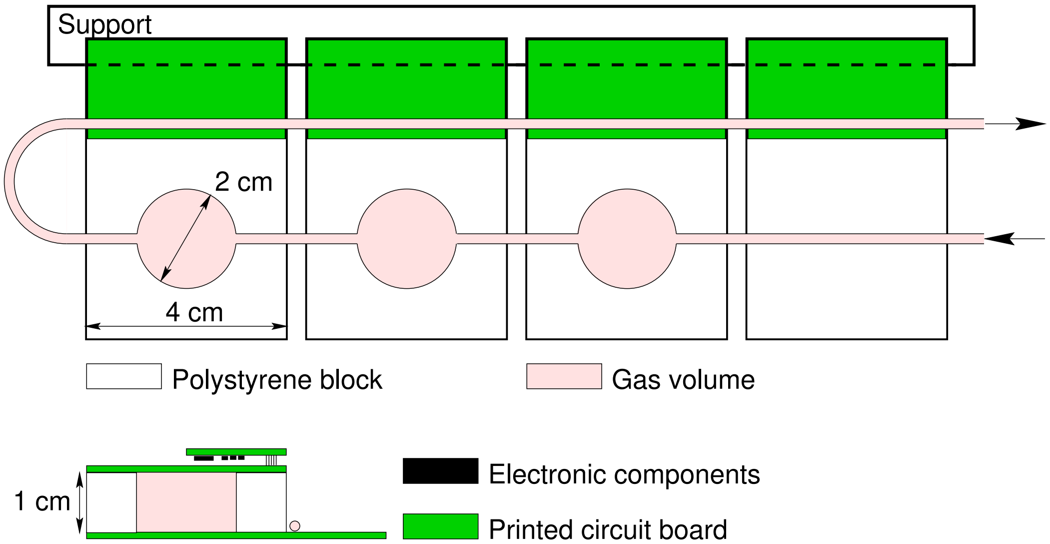
Increased acceptance for Λ^0 decay products



- In Vacuum detector system
- 2 Rings of double sided silicon detectors
  pitch = 150 μm, thickness = 300 μm
- Full Installation performed in March 2002,
- Commissioning under way

Beam Loss Monitor





- 2 sets installed on either side of the positron beam line.
- System is NOT connected directly to the Dump Kicker.
- Triggers are generated at each positron injection (these triggers need to be suppressed).

Background conditions

- Background conditions are acceptable, full detector can be turned on.
- Chamber Currents in Hermes Front Region and Synchrotron rates are slightly higher then those in 2000. ⇒
- Proton background rates vary from fill to fill, but a good fill is similar to 2000. ⇒

Requests to HERA

- We are ready for stable positrons and higher currents.
- When $I_e \sim 30$mA, one (short) fill for a magnetic field scan with the Transverse Target Magnet.
- Polarization tuning as soon as background conditions around the ring stabilize.
- A longer access (2 or 3 days) somewhere in the next 4 months in order for some maintenance work to be scheduled.
- Preference:
  Continue with positrons until the X-Mas shutdown.