Polarisation at HERA: status report

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Polarisation at HERA:

- Significant upgrades under way
- Transverse Polarimeter (TPOL)
  - Completely new DAQ
  - some new detector components
  - new people
- Longitudinal Polarimeter
  - Short term: continuation of existing LPOL
  - Long term: new laser system and DAQ for
  - better precision (cavity project)

POL2000:

group with members from H1, HERMES, ZEUS, DESY measure the polarisation in HERA–e and provide this information to the machine and the experiments

Transverse Polarimeter

Upgrade Status:

- Hardware:
  - Basic detector and detector hardware (mostly) installed and operational
  - Additional position sensitive detector under construction
  - Data acqusition under test

GOAL:

- Have a working system (equivalent to the old) ready this summer
- Have the full system installed and working in the fall

What do we need:

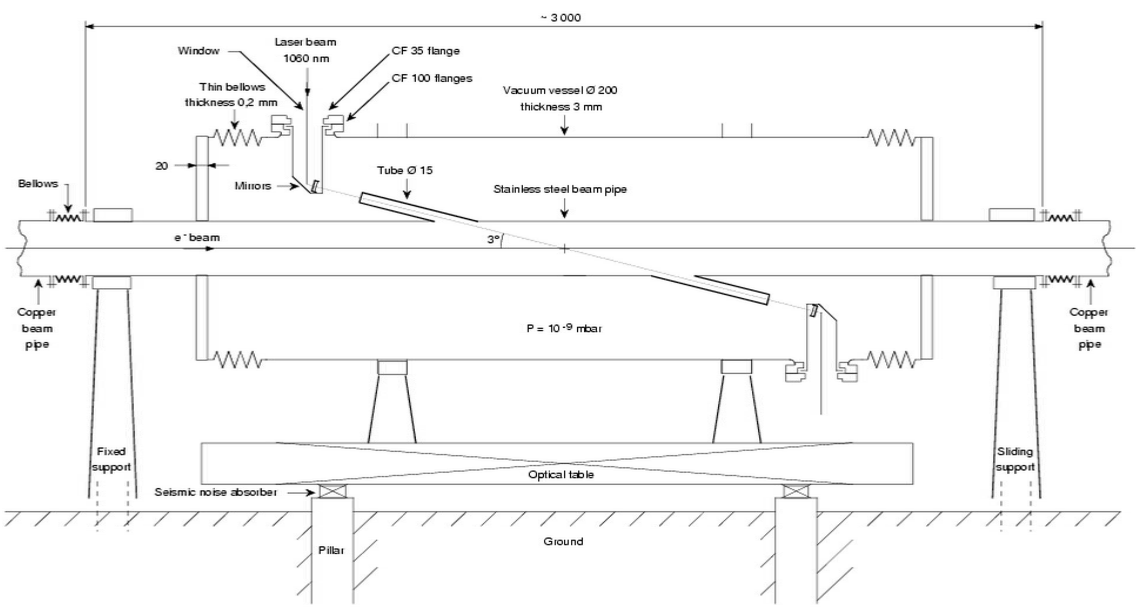
- Some (limited) access during May and early June to do final commissioning
- Access days in October to install the position sensitive detector and associated electronics

Longitudinal Polarimeter

- Current LPOL: see HERMES: commissioning well under way, no problems are expected (essentially unchanged system)
- Longer term upgrades:
  - No immediate work planned
  - Installation foreseen for next year
  - AFTER Lumi upgrade: will need some close collaboration with the machine groups to finalize the installation plans, interfaces to the machine, etc.

FABRY-PEROT CAVITY AT HERA

Option 2



Polarimeter Operation

At the beginning: expect no significant changes

- Parameters/ values will be distributed as before
- TPOL will be run–in during unpolarised running: expect some strange behaviour
- LPOL: expect "routine" operation

Later in the run:

- Operational mode of polarimter(s) (beginning with the TPOL) will slowly change to reflect the important role of the colliding beam experiments
- Exact mode of operation and date of changeover will depend on polarimeter and on machine (polarisation) performance.

We are looking forward to an interesting and challenging commissioning time for the HERA polarimetry, in continued good and close collaboration with the machine groups and the HERA experiments.