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HERA coordination meeting
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HERA lepton beam polarimeters status summary

- Polarimeter status
- Polarimeter absolute calibration
- Systematic studies

Polarimeter status

- TPOL
  - Cooling system in west hall "upgrade" — TPOL could not be switched on on Sunday, Oct 12.
  - Cooling system repaired quickly on Monday
  - TPOL operational since Monday afternoon
- LPOL
  - Discovered hole burned into lead shielding! Radiation?
  - Some problems with timing and DAQ sorted out last Friday
  - LPOL operational since Friday afternoon Reminder: LPOL is switched off for $I_e < 10$ mA.

Polarimeter calibration

- First post-shutdown data: LPOL numbers 7% higher than TPOL numbers

  Which polarimeter is right?

- Data from Friday afternoon: ratio LPOL/TPOL closer to 1?

- need more data to understand this

  LPOL/TPOL ratio is the main worry of the pol2000 group.

- TPOL calibration: stand-alone (new offline analysis). Compares well to old risetime calibration + MC studies (converter for SI detector)

- LPOL calibration: stand-alone (includes corrections for calorimeter non-linearities)

Polarimeter systematic studies

- Only one HERA fill was available for polarimeter studies so far. Used to calibrate the LPOl calorimeter.
- Proposal: continue LPOL and TPOL studies during luminosity operation.
- Reminder: absolute calibration of TPOL using risetime method gives ultimate precision.

  But: requires HERA operation with flat machine (all solenoids and spin rotators off). Time estimate: one week

Conclusions

Polarimeters in good shape, LPOL/TPOL calibration under investigation.