Luminosity System
Status of Detectors

- Photon Detector
- Cherenkov Water Counter
- Electron Tagger at 6 m
- Electron Tagger at 40 m

Photon Detector

New calibration 19.10.02 (previous 21.06.02)

- Response of individual channels did not change
  $\Downarrow$
  detector is stable (fibers and PM's are OK)
- E-scale for the analog sum of y-strips changed (dropped by $\sim 15\%$)
  $\Downarrow$
  due to changes in electronics (new MFCC, etc.)

The effective counting threshold for the online lumi measurement was changed: 5 GeV $\Rightarrow$ 5.9 GeV

For two weeks in October (9.10.-27.10.) luminosity was underestimated by 12%

(but hardly any data taken in this period)

Cherenkov Water Counter

Counter is installed, HV is ON

No Trigger Element yet

Readout not yet working

Expected to be operational after the shutdown (2003)

Electron Tagger at 6 m (ET6)

The Electron Tagger is working

- Channel response (12 channels) internally equilized
- HV is tuned and TE 115 (LU_ET_6) is operational
- Subtriggers:
  - Monitoring:

    ```
    s99  LU_ET_6   (e_Tag_6 single rate)
    s94  LU-ET_6 && LU_PD && !LU_WatVet (e_Tag_6 & PD)
    ```
  - Physics:

    ```
    s80  etag_all
    s81  etag_all&&(SPCLe_IET>1||SPCLe_IET_Cen_2)
    etag_all=
    (LU_ET_40&&!LU_PD_low&&!LU_WatVet)||(LU_ET_6&&!LU_PD_low)
    ```
- No absolute (offline) calibration yet

Electron Tagger at 40 m (ET40) (formerly ET44)

The detector is installed in the tunnel

No Trigger Element yet

Readout not yet working

Expected to be operational after the shutdown (2003)

Conclusions

Luminosity system is ready and taking data

but

still a lot to be done
to achieve better system performance:

- readout
- trigger elements
- calibration
- ...