

Status of the Polarimeters

Ties Behnke, DESY

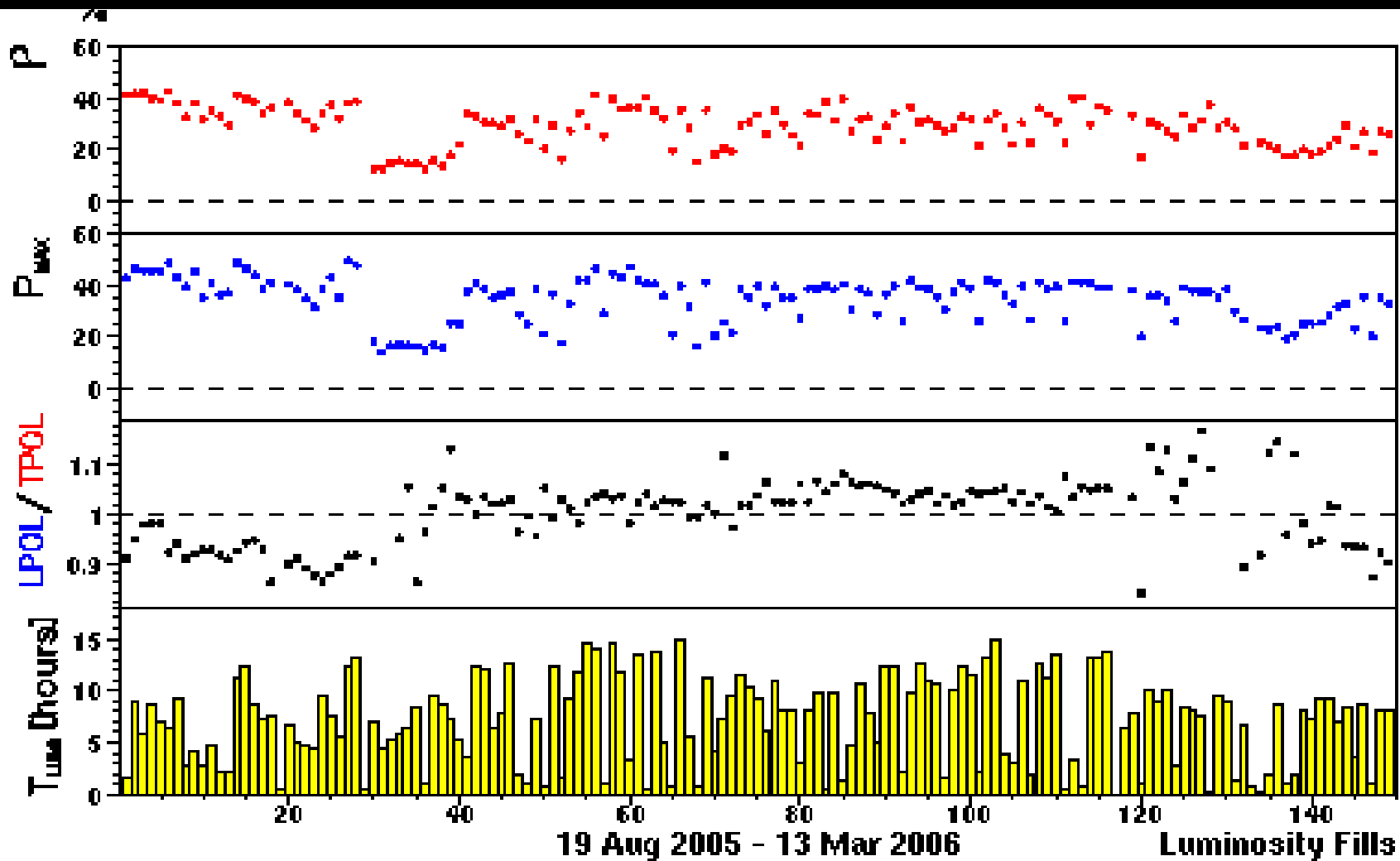
Status of LPOL and TPOL:

Restart in 2006 went basically smoothly

no major hardware problems

Both LPOL and TPOL are now technically in a good state and deliver data stably and with high efficiency

TPOL, LPOL/TPOL 05/06



The main problem

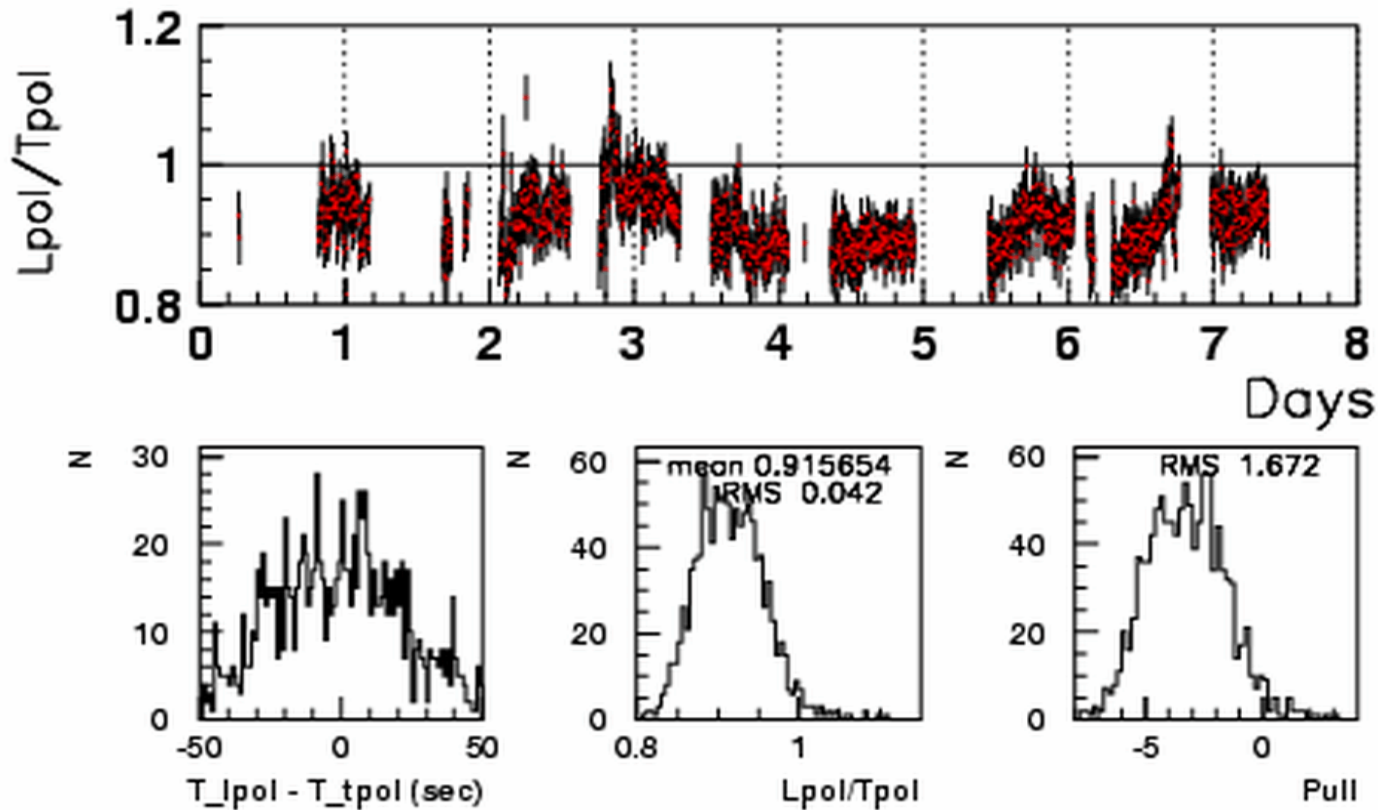
Main problem also in 2006:

LPOL/TPOL ratio is unstable
and tends to be $\ll 1$ (around 0.9 at the moment)

Large values around 1.2 at the beginning of the year have been understood
and are repaired (problem with LPOL luminosity)

Extensive studies are ongoing to understand the problem,
but
we are really puzzled and have no clear idea where the problem lies

LPOL/TPOL ratio



The ratio in recent data: 0.92

LPOL cavity Status

- Took out calorimeter, did extensive test beam calibration at DESY
- Added significant new shielding to fight electronic noise
- Moved cavity feedback electronic into tunnel to solve noise problem



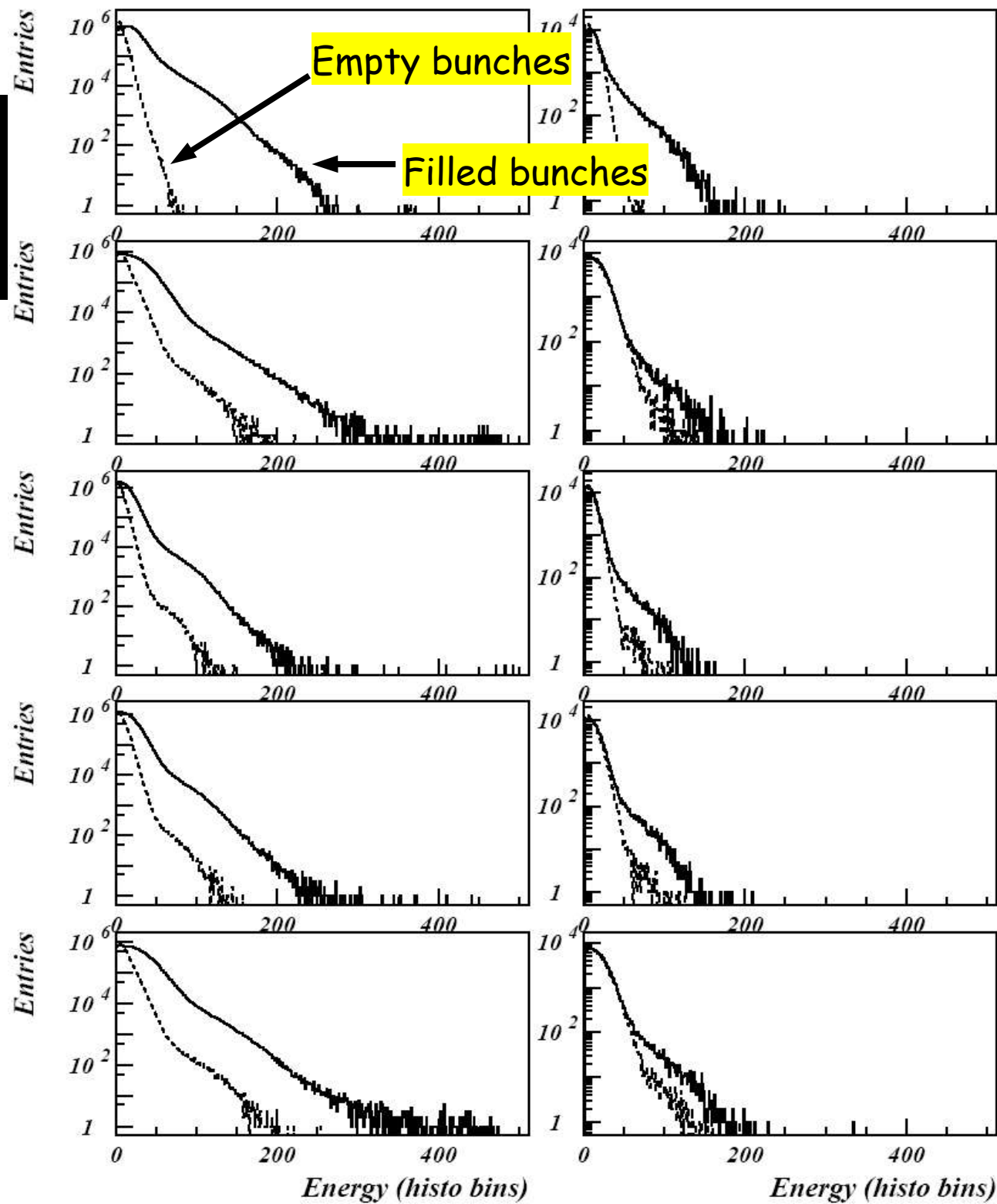
Reinstalled calorimeter and re-commissioned cavity system

- Can lock the cavity again even in presence of beam: good news
- Noise problem in calorimeter improved, but not yet solved
suspicion: synchrotron radiation background? Other backgrounds?

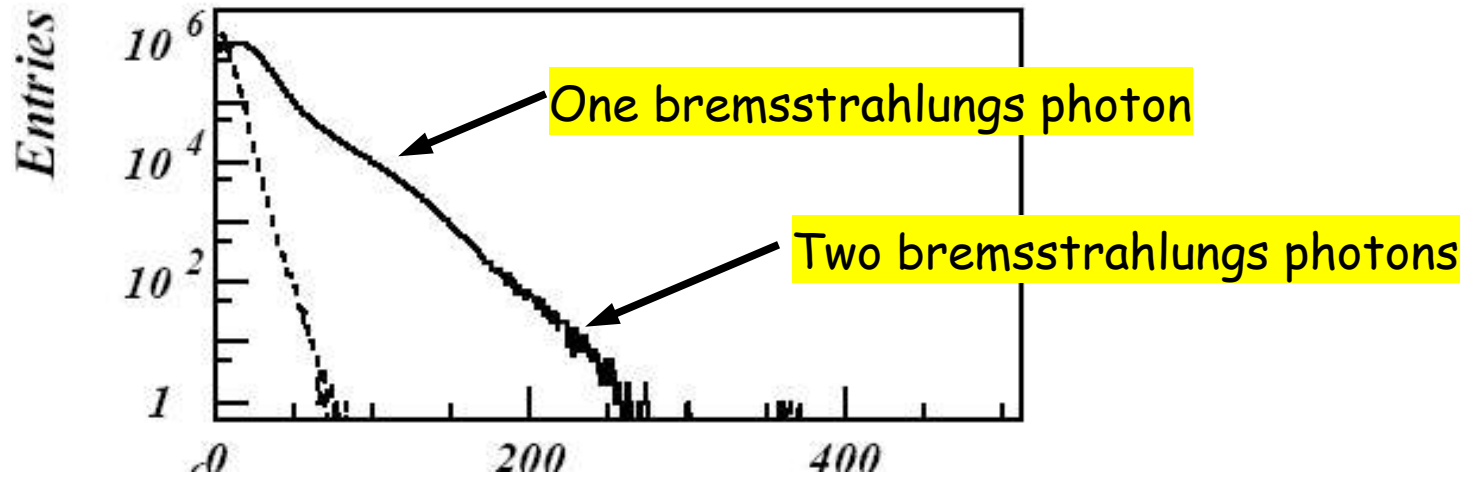
Installed additional shielding during last access day to reduce synchrotron backgrounds: latest news: looks promising

Recent Attempts

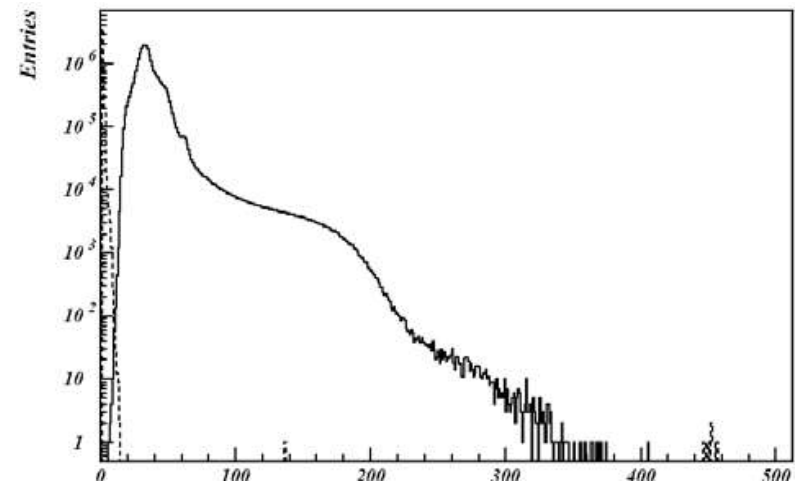
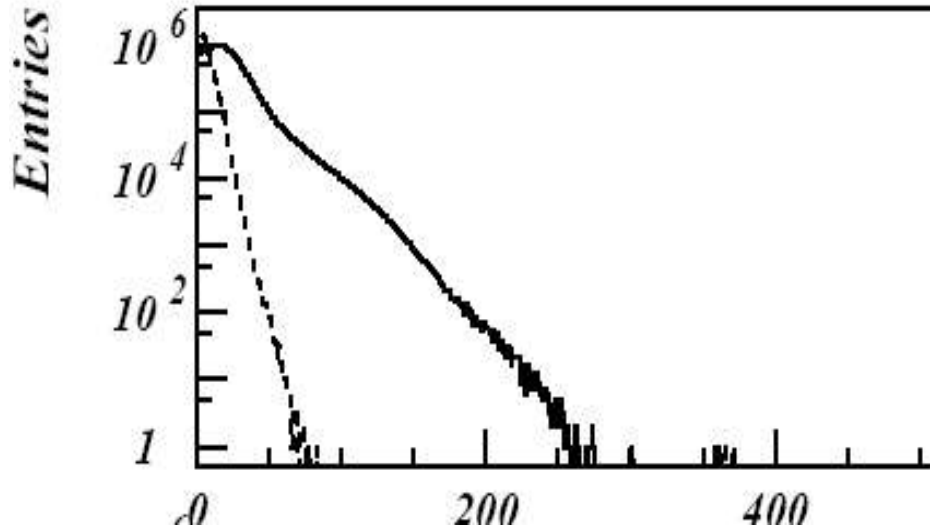
- Brems spectra seen
- But rather high backgrounds (reason is not really understood)
- Attempts to see Comptons failed again



Investigating the Brems Spectra



Comparison new calo (left) with sandwich calo (right)



Summary

LPOL and TPOL technically are fine,
but LPOL/TPOL is bad and not understood

LPOL cavity commissioning is progressing,
but problems with background are still bad and keep us from seeing
Compton photons.