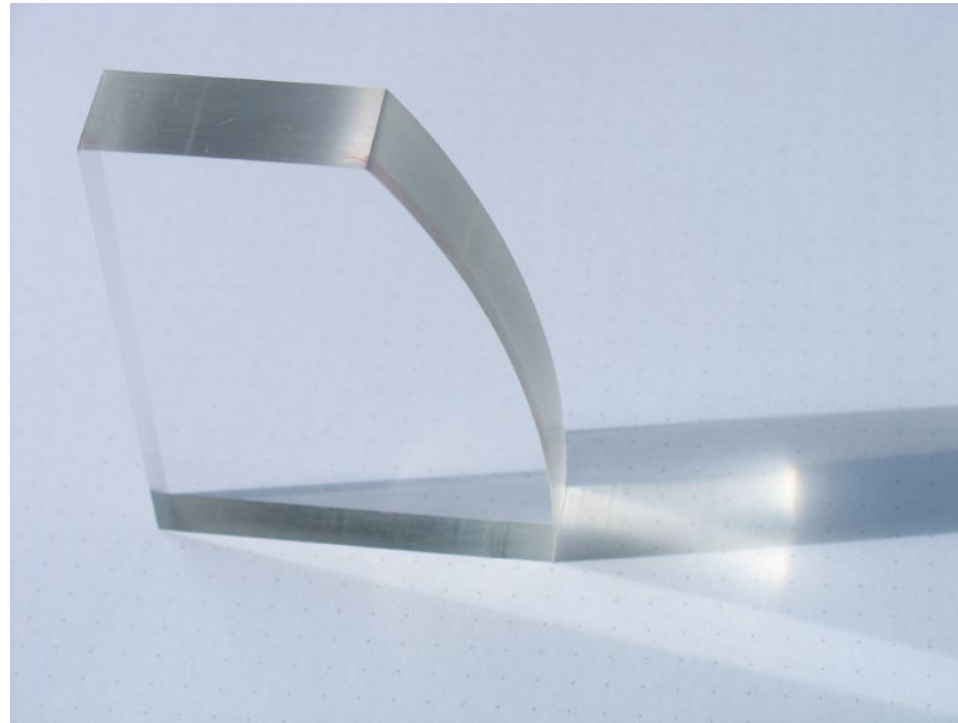


# Very first report from Giessen on the GSI test



Klaus Föhl *on behalf of the crew*  
PANDA PID Cherenkov group

GSI – EVO meeting  
9 September 2009

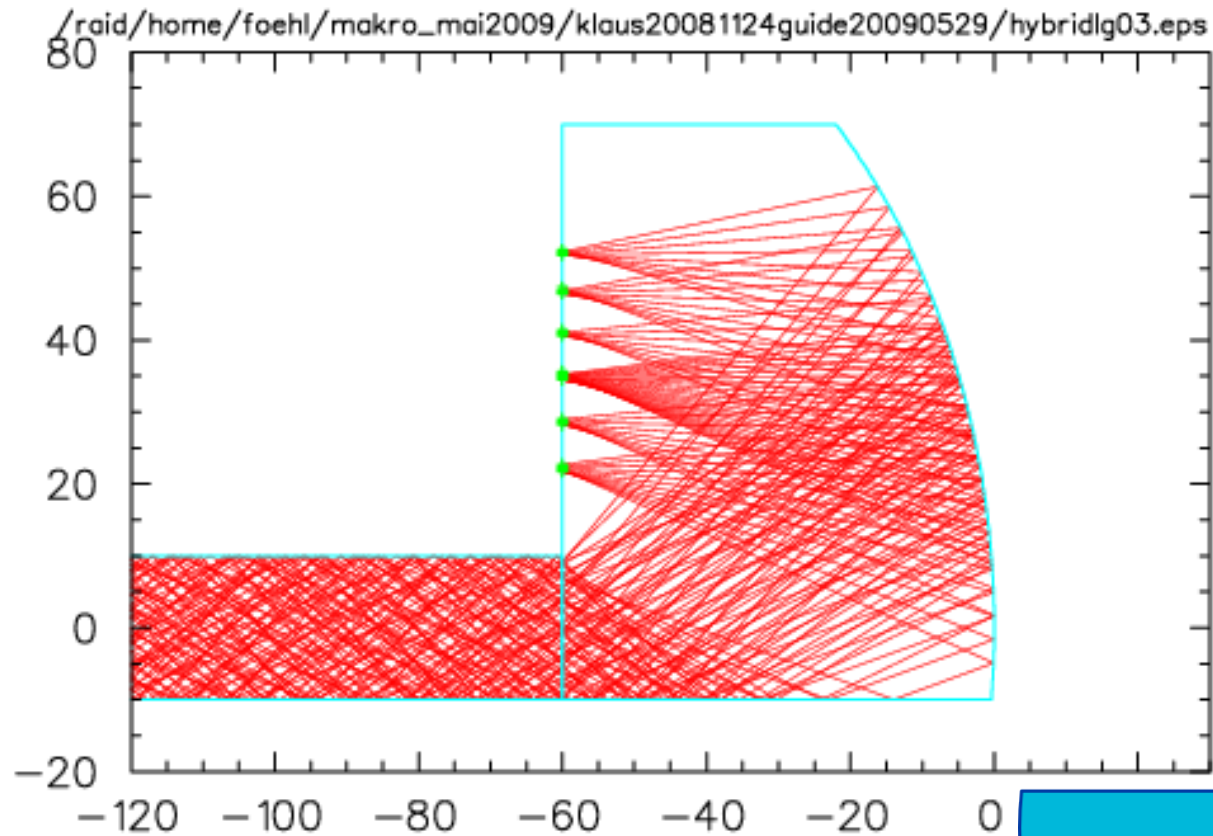
JUSTUS-LIEBIG-



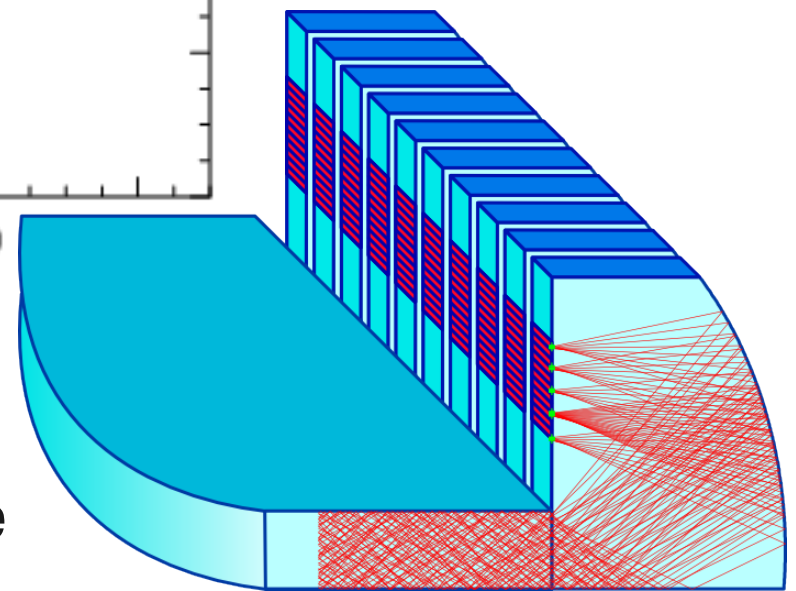
UNIVERSITÄT  
GIESSEN



# Hybrid Design Light Guide



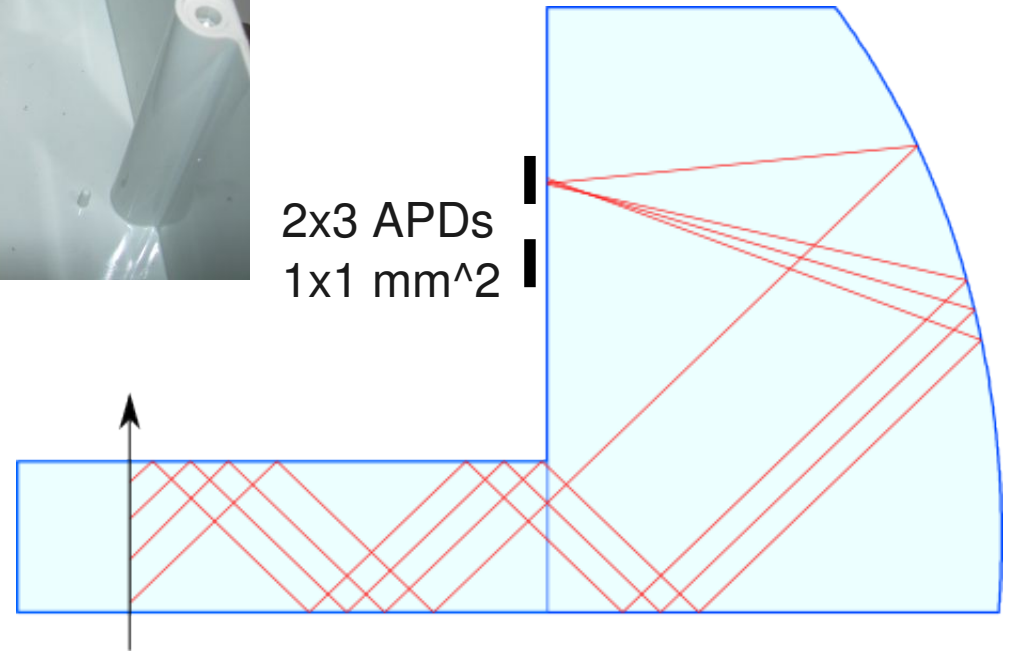
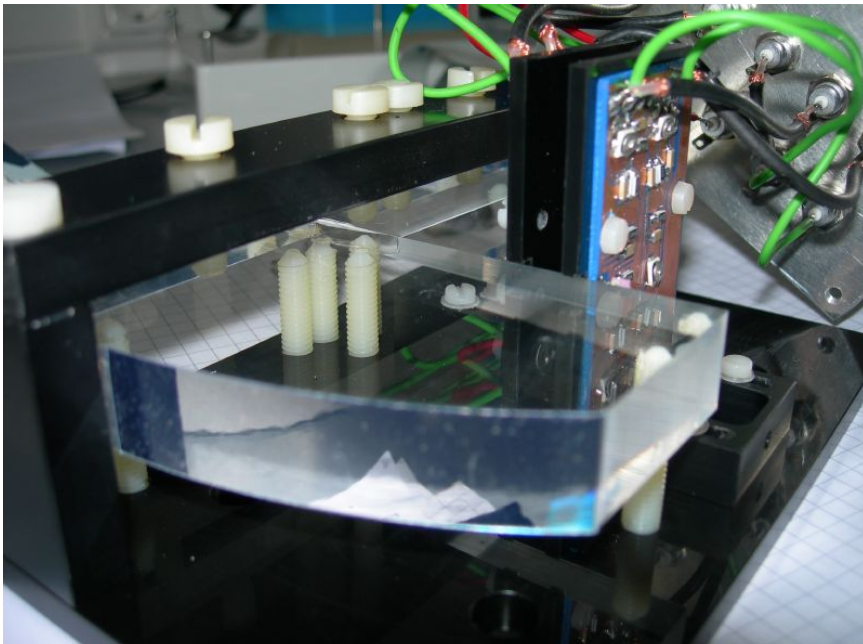
- time-of-propagation measurement
- focussing element and position sensitive



# Small Prototype for Test

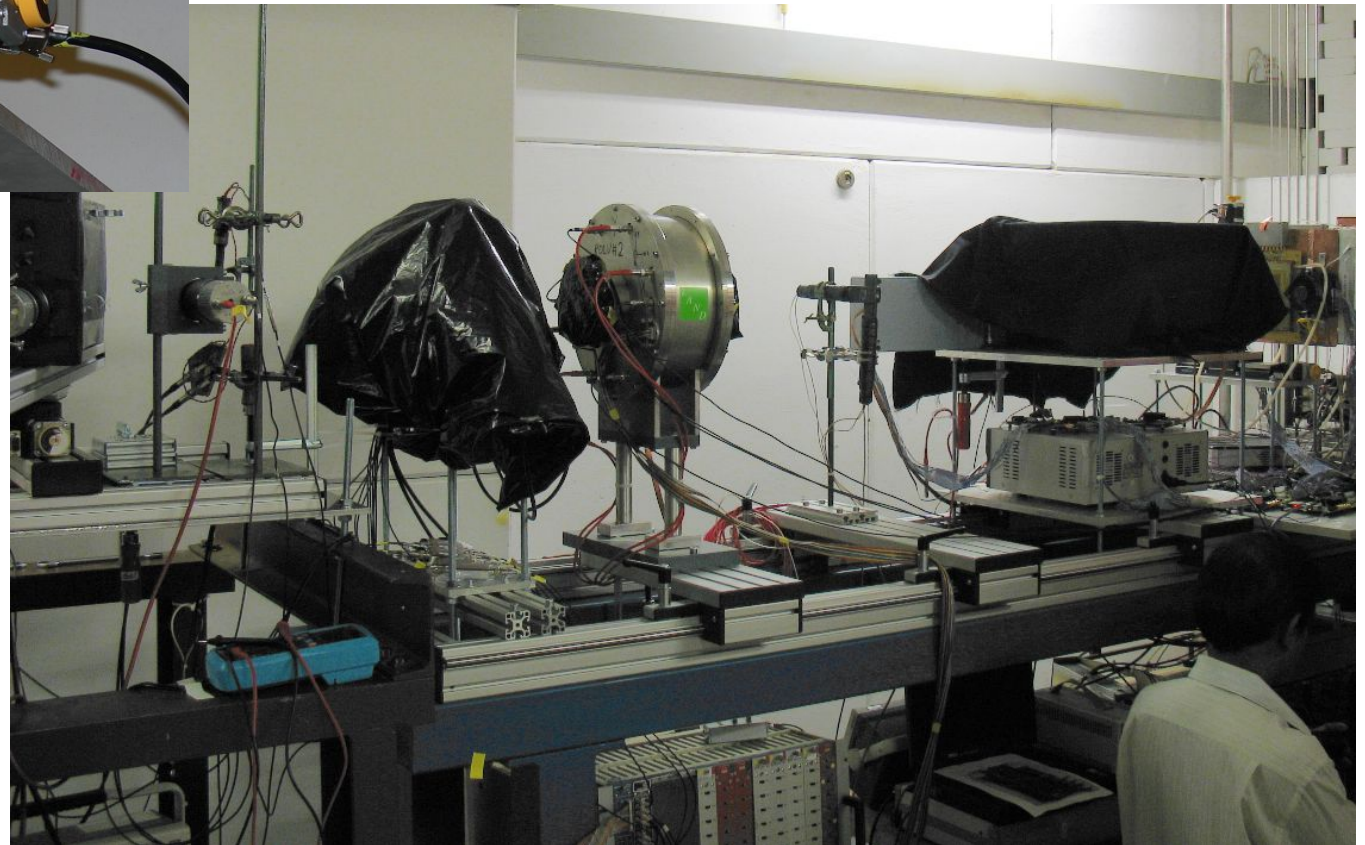
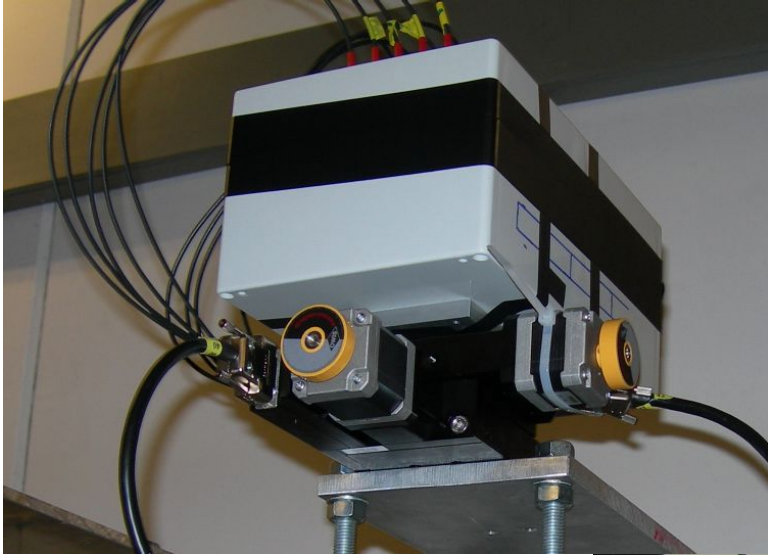


2x3 APDs  
1x1 mm<sup>2</sup>

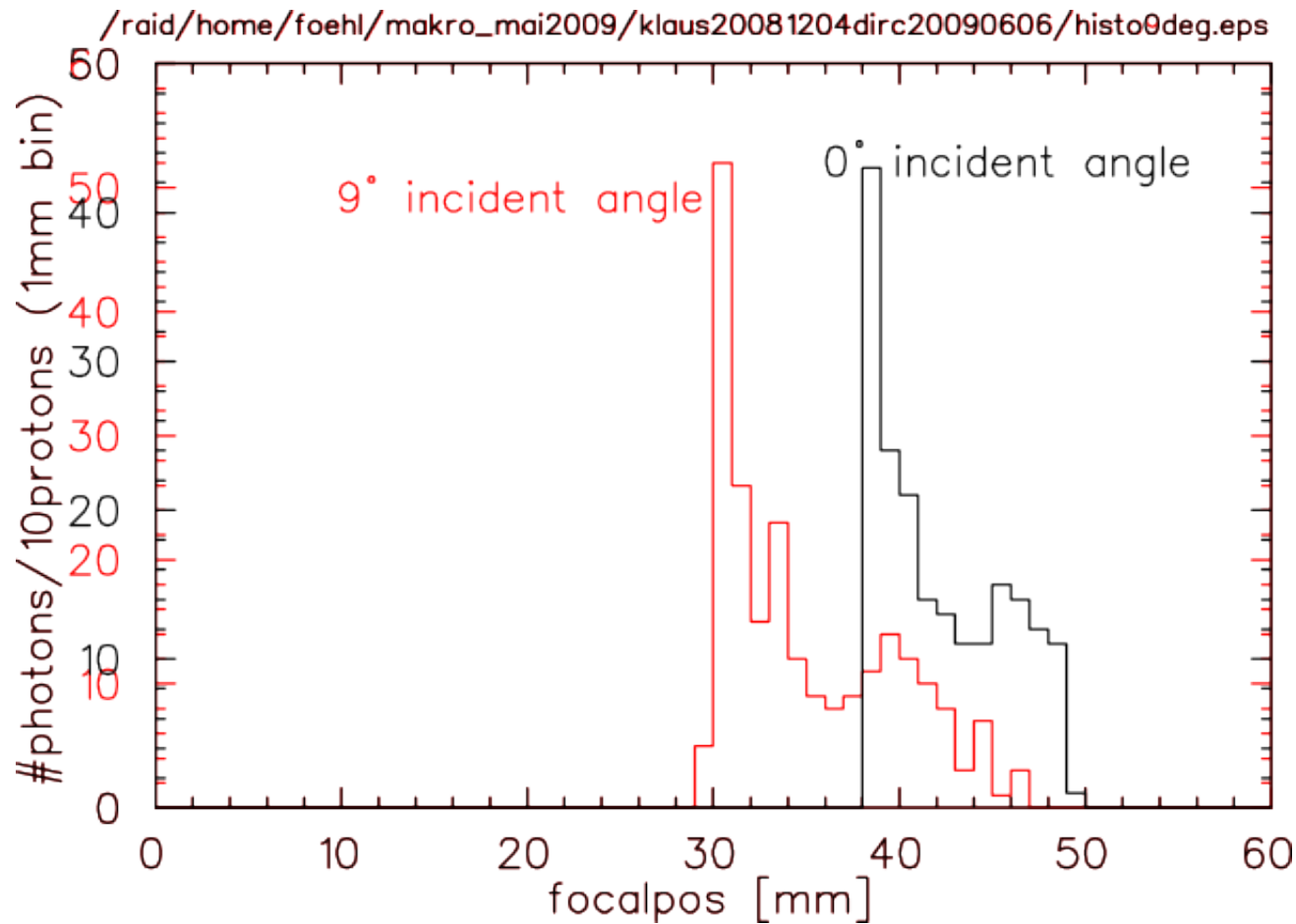




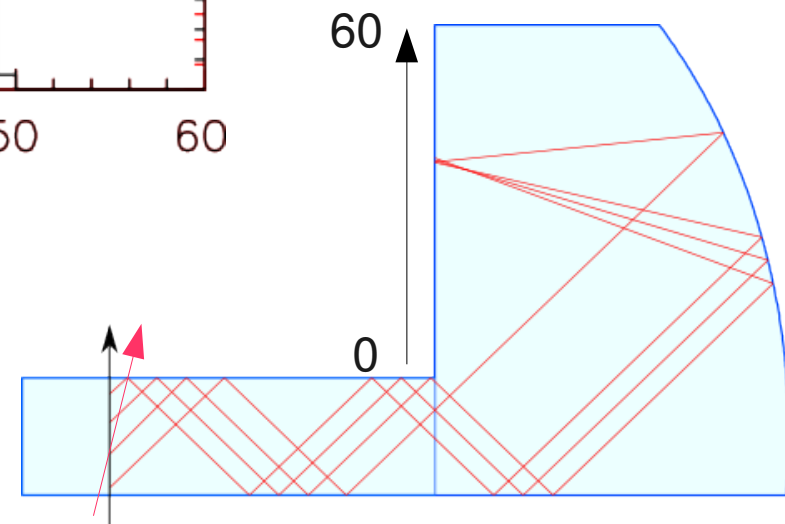
# Test beam area at GSI



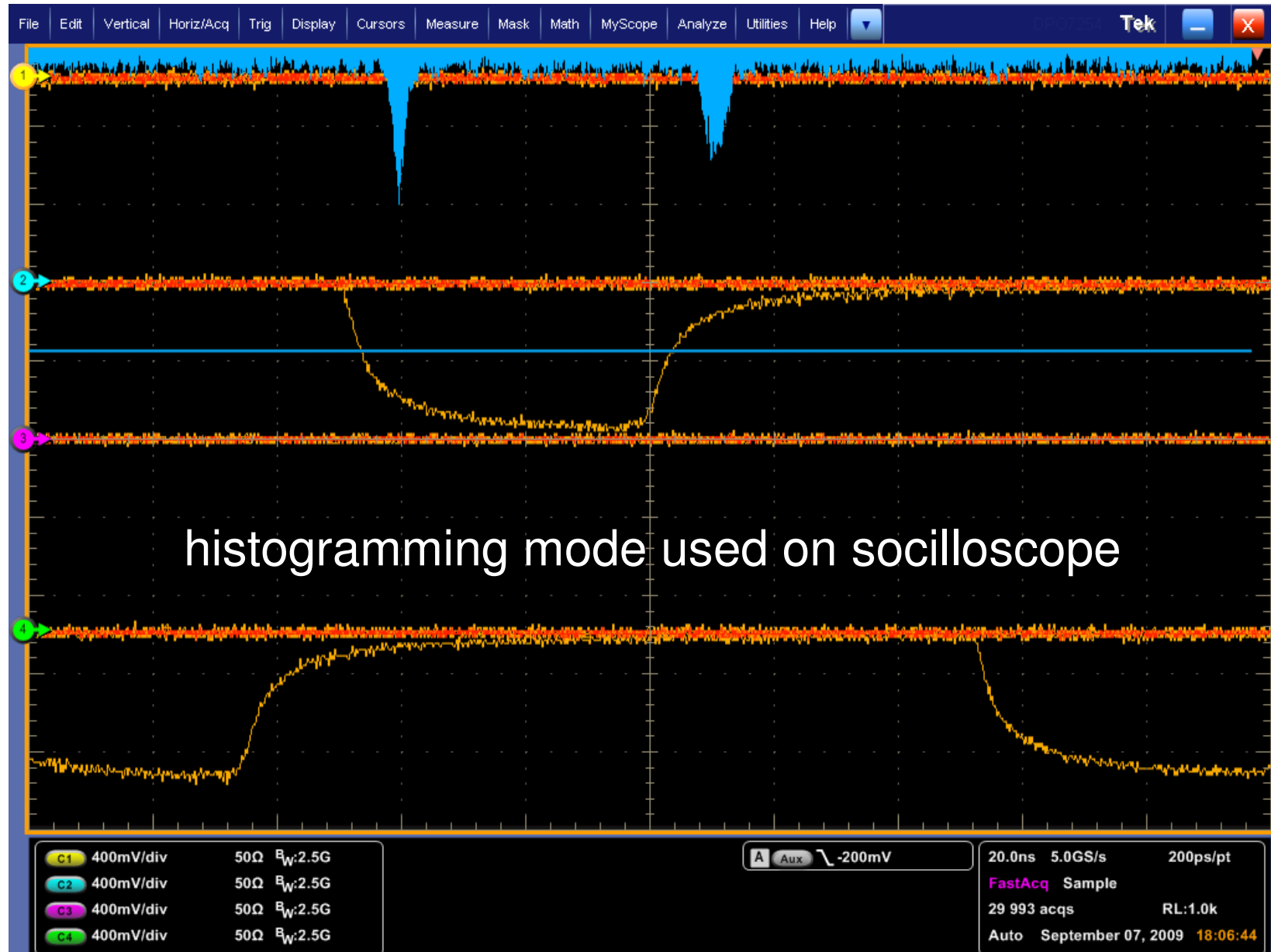
# Photons on the Focal Plane



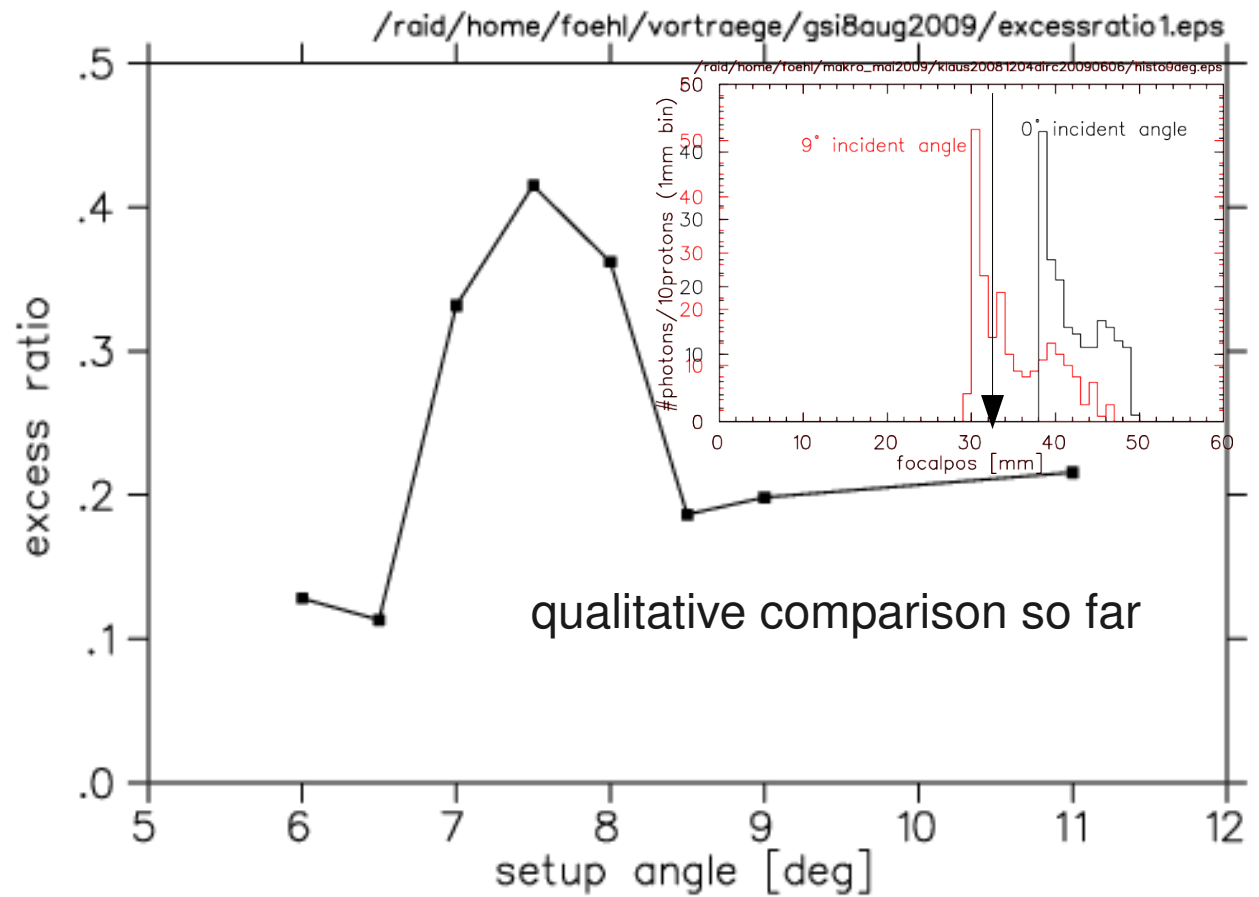
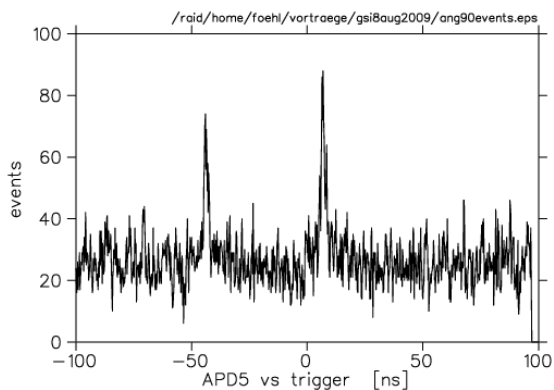
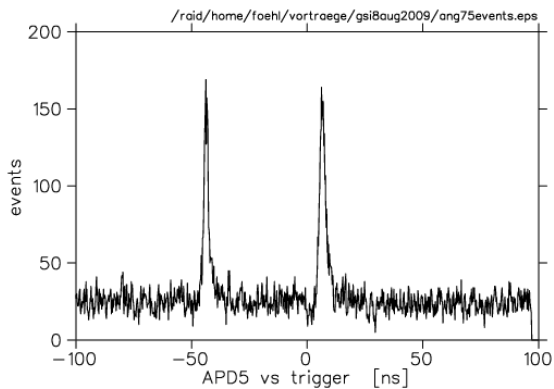
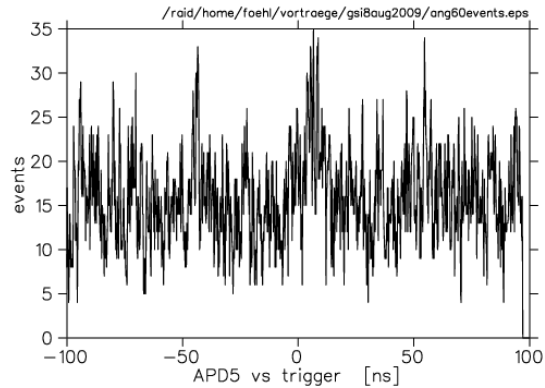
N.B. computed for  $p_{\text{proton}}=2.3\text{GeV}/c$



# APD versus Trigger timing

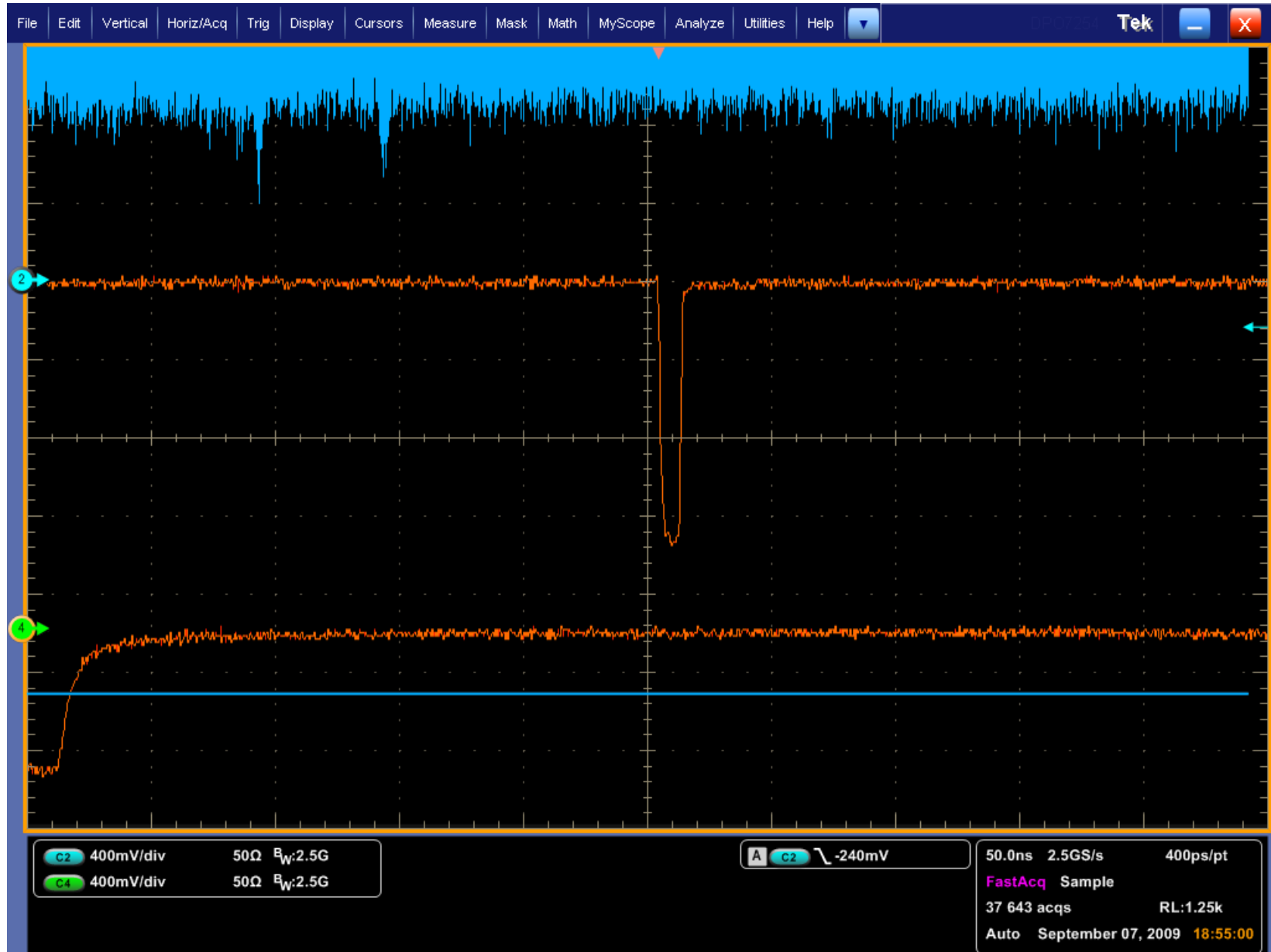


# APD versus Trigger timing



N.B. beam energy actually was  $T = 2.0\text{GeV}$

# Timing APD2\*Trigger vs APD5

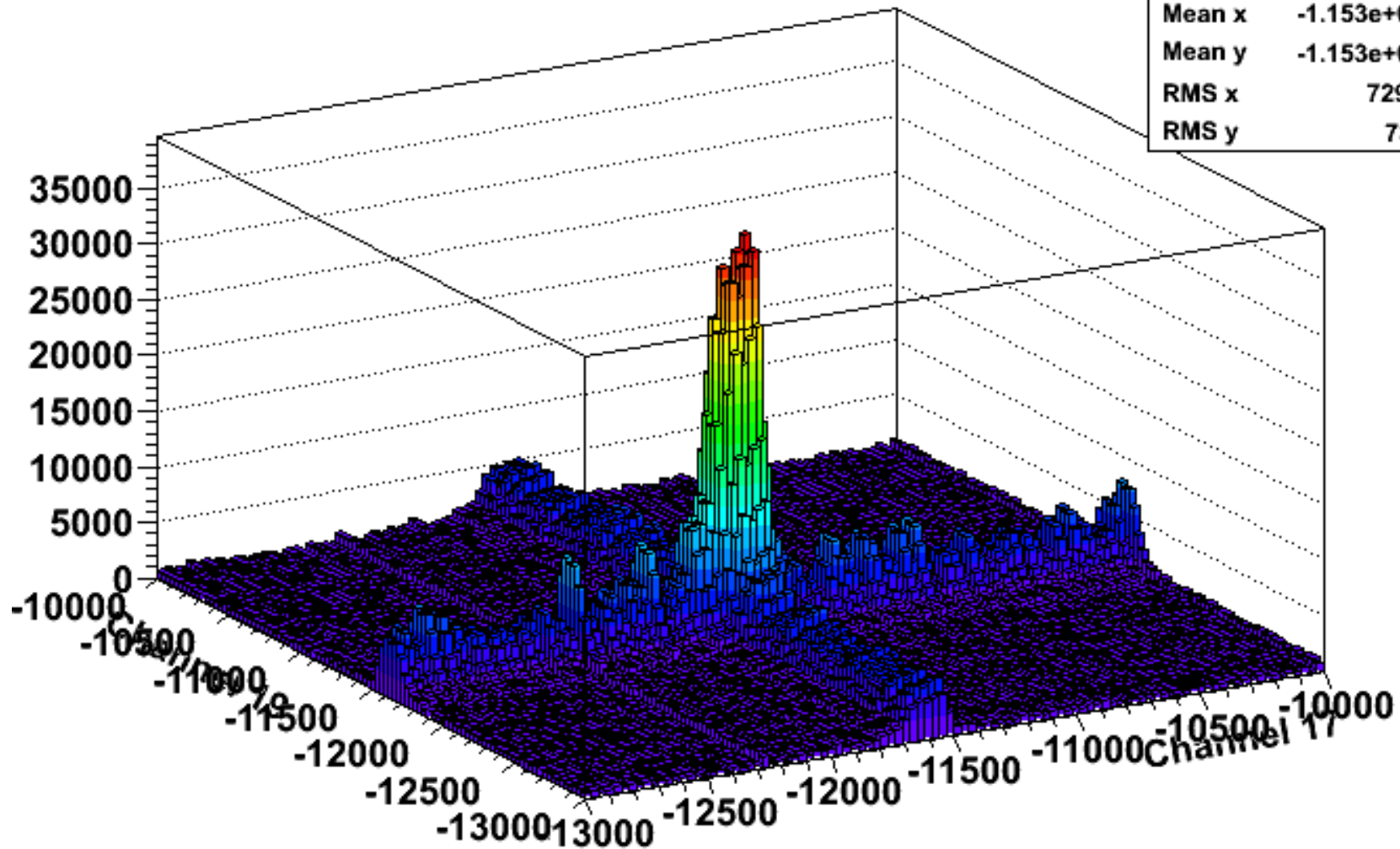




# Very first offline analysis (one run)

correlations run 303

hist	
Entries	1.339781e+07
Mean x	-1.153e+04
Mean y	-1.153e+04
RMS x	729.1
RMS y	735



# Very first conclusions

- we have seen focussing light guide working
- we see coincidences between APDs
- very first stages of analysis, preliminary of course
- **THANK YOU to all involved**