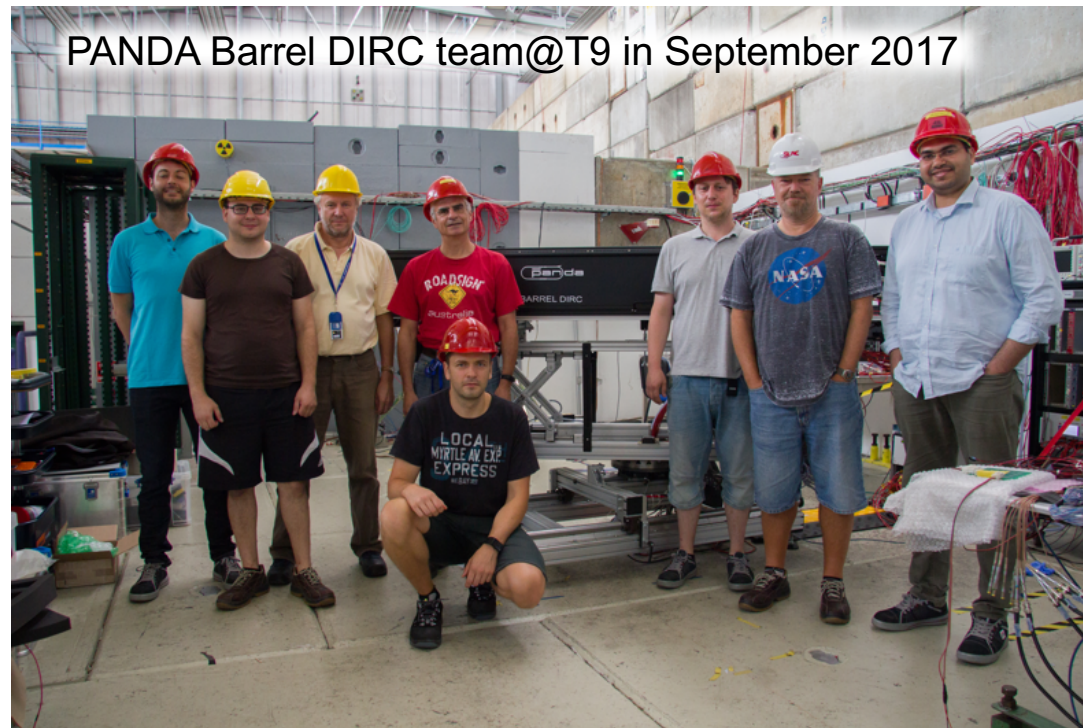


PANDA BARREL DIRC

PROTOTYPE TEST AT PS/T9

Aug 23 – Sep 13, 2017

Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun
20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Aug	Aug	Aug	Aug	Aug	Aug	Aug	Aug	Aug	Aug	Aug	Sep	Sep	Sep	Sep	Aug	Aug	Aug	Aug	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep	Sep
34							35							36							37													
EA-Irrad																F. Ravotti																		
Emulsion J. Schwiening										RE22 PANDA										J. Schwiening								RE22 PANDA				G. Alex		
TOF-MRPC P. Martinengo						ALICE ITS						LHCb TORCH T. Gys						ALICE ITS T. Gys						LHCb TORCH						F. Guber				
nTOF																E. Chiaverri																		



PANDA Barrel DIRC team@T9 in September 2017

THE
CATHOLIC UNIVERSITY
of AMERICA 

 **FRIEDRICH-ALEXANDER
UNIVERSITÄT
ERLANGEN-NÜRNBERG**



JOHANNES GUTENBERG
UNIVERSITÄT MAINZ

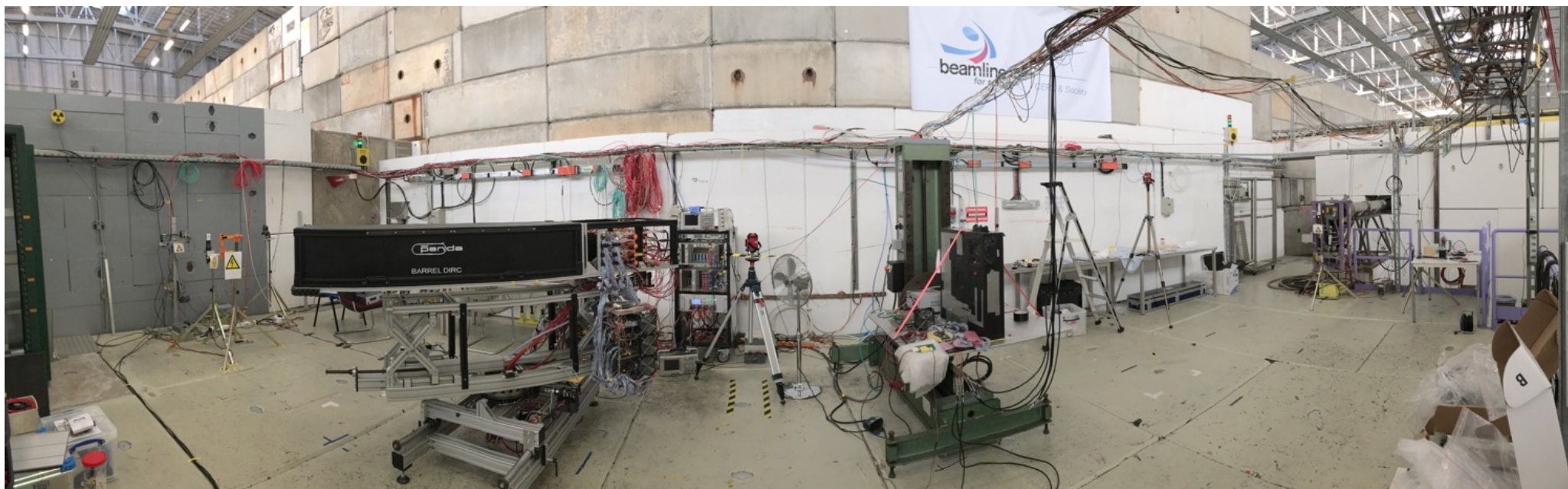


Evaluate performance of advanced/near-final configuration

Data sample **statistics** in 2016 were sometimes too small → collect high-statistics data sets, only few configuration changes, maximize statistics for each data point. ✓

Updated mechanics to study impact of **azimuthal angle** on hit pattern, PID performance. ✓

Improved components: new 3-layer cylindrical lens, new prism, new readout modules. ✓

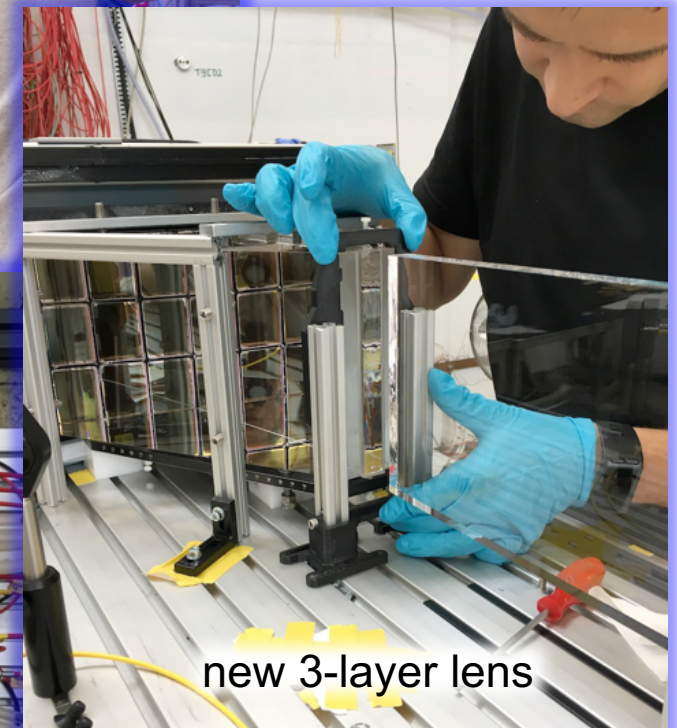
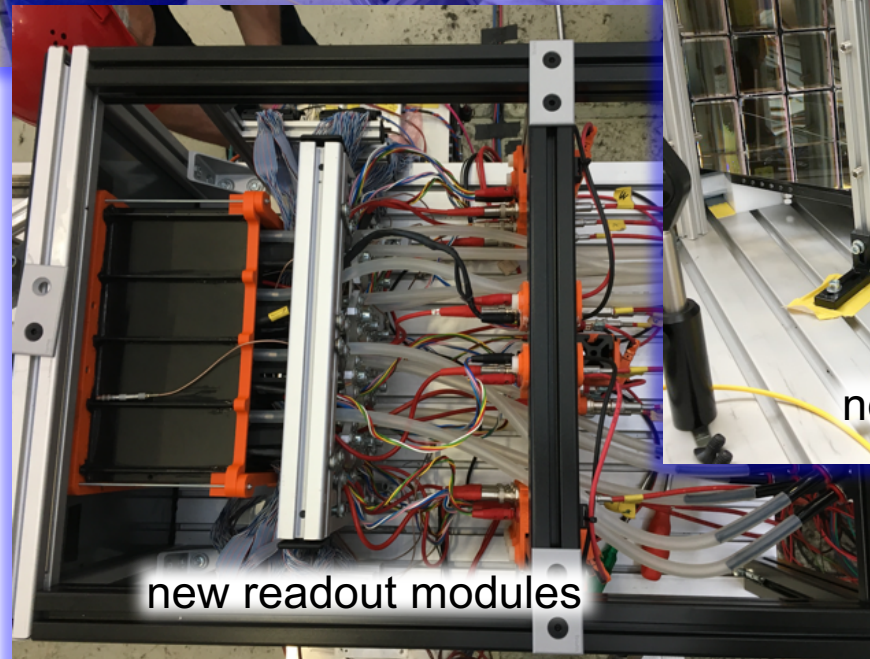


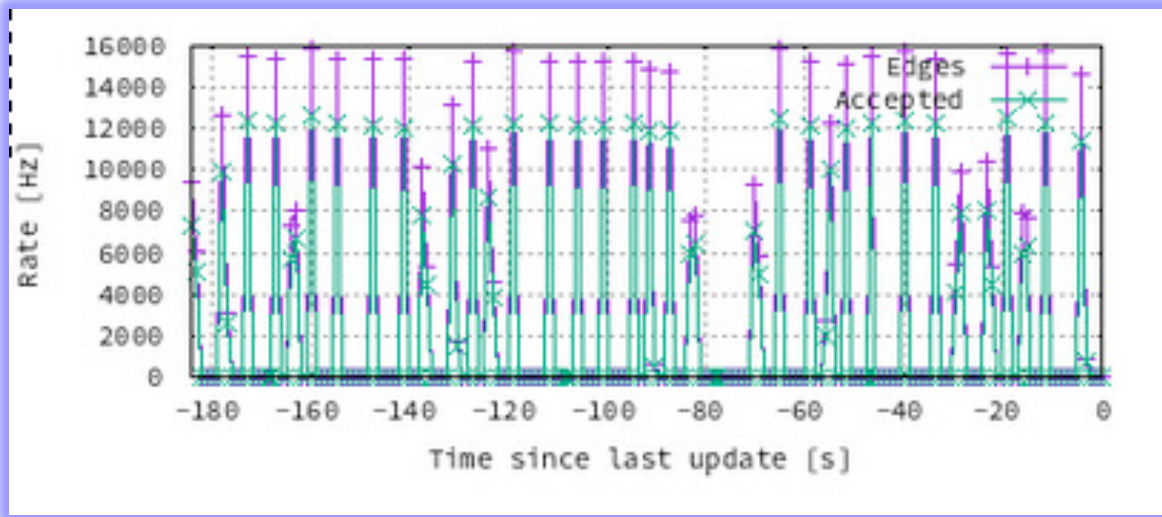
TOF2, Trigger2

Barrel DIRC

Fiber hodoscope

Trigger 1, TOF1

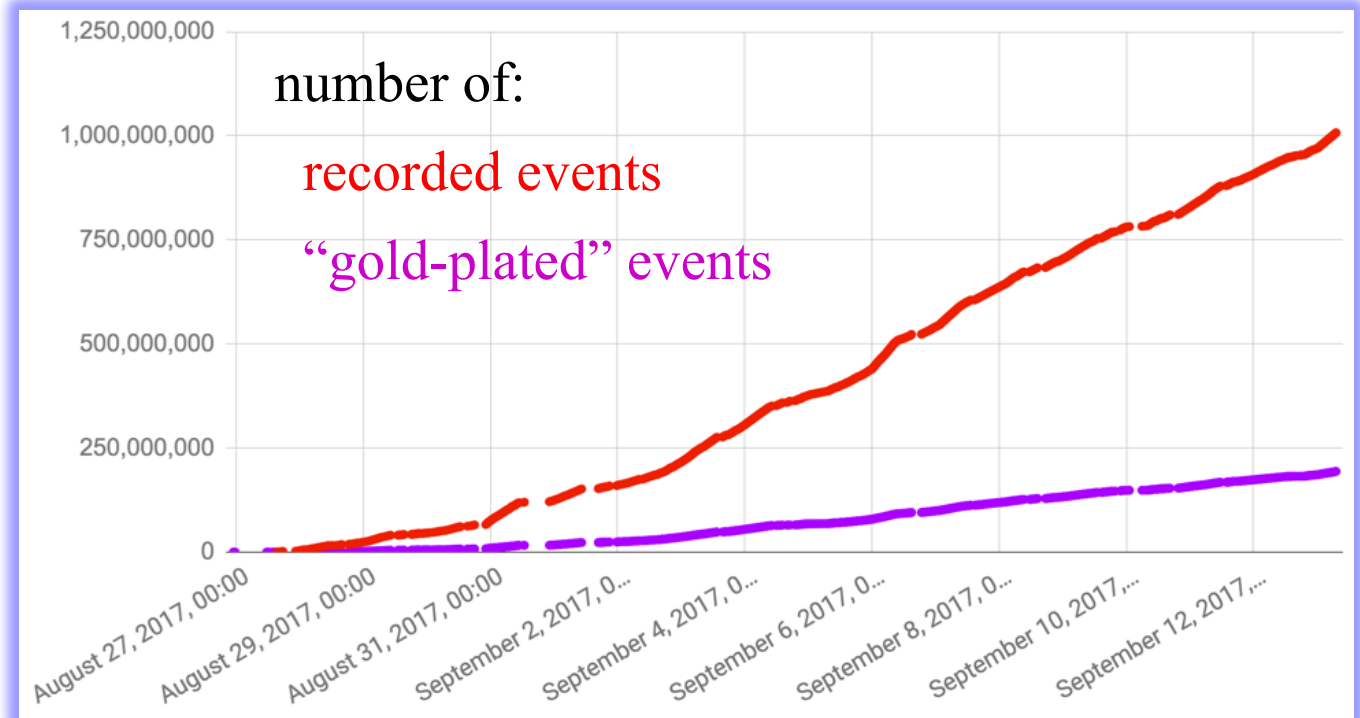


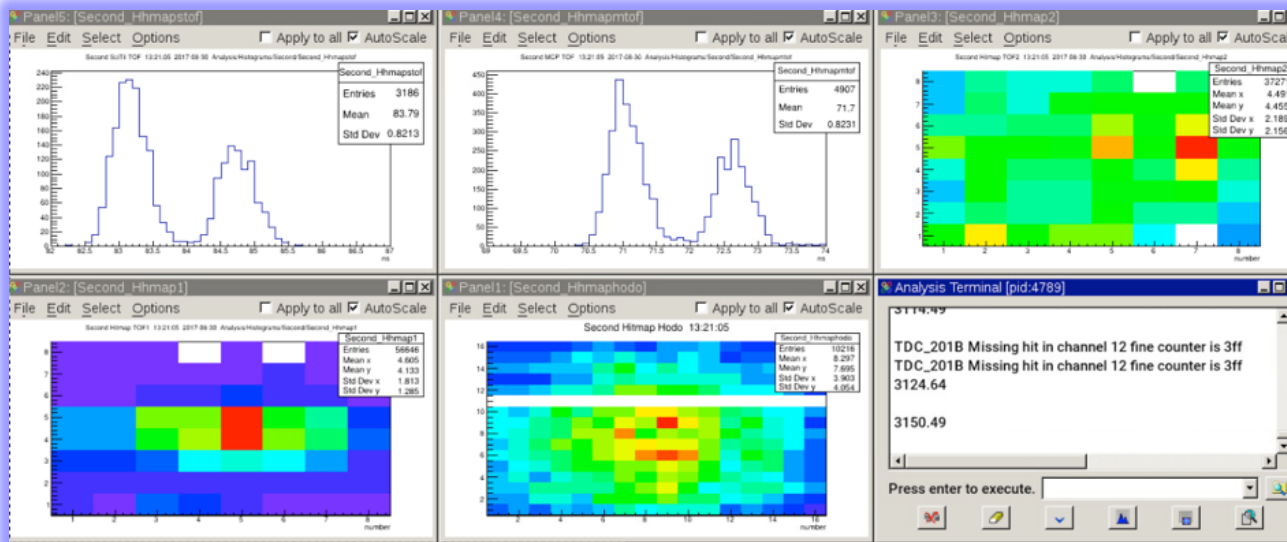


Spill pattern, Sep 6, 6:15am

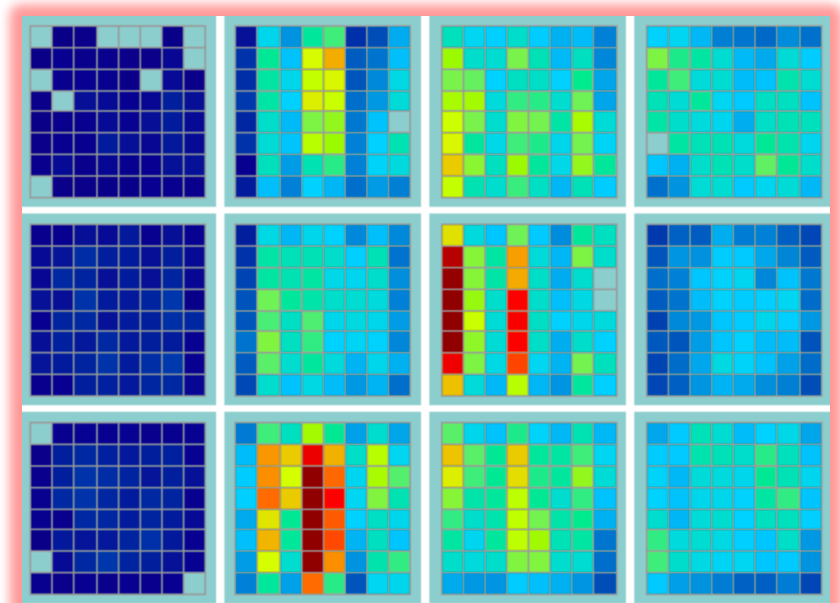
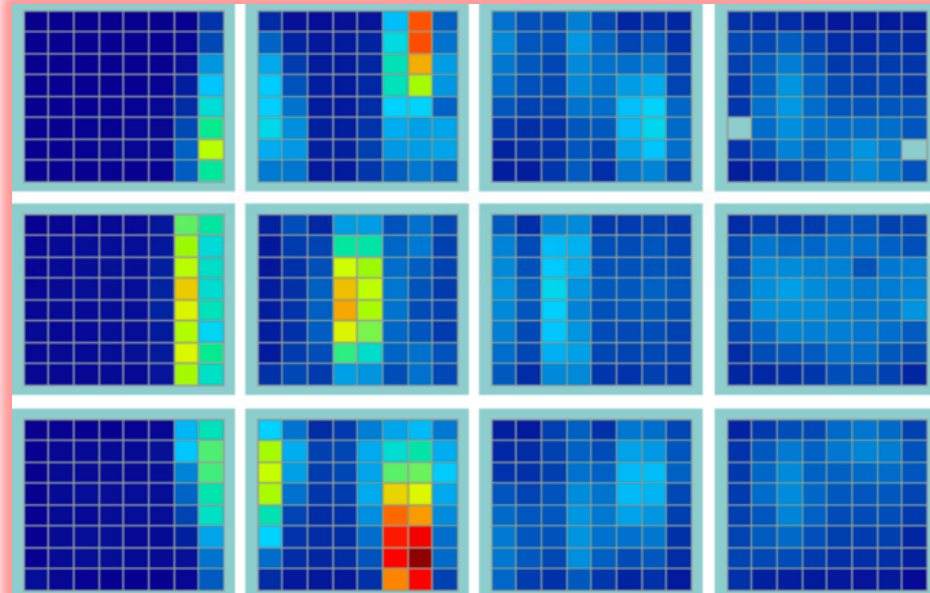


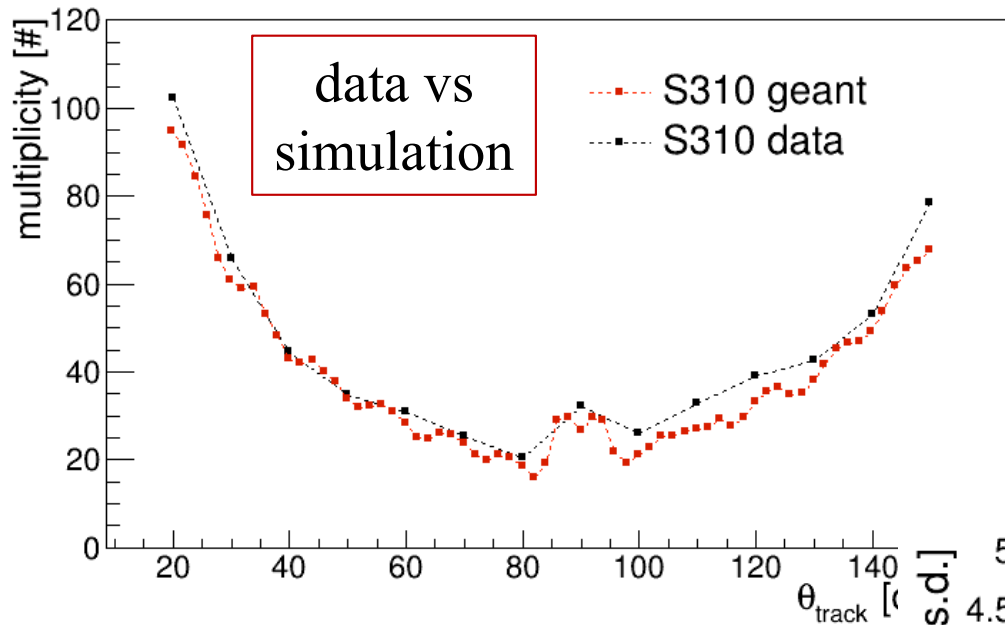
thanks, PS, thanks, TOF!





Live monitoring of
beam counters and
DIRC hit patterns



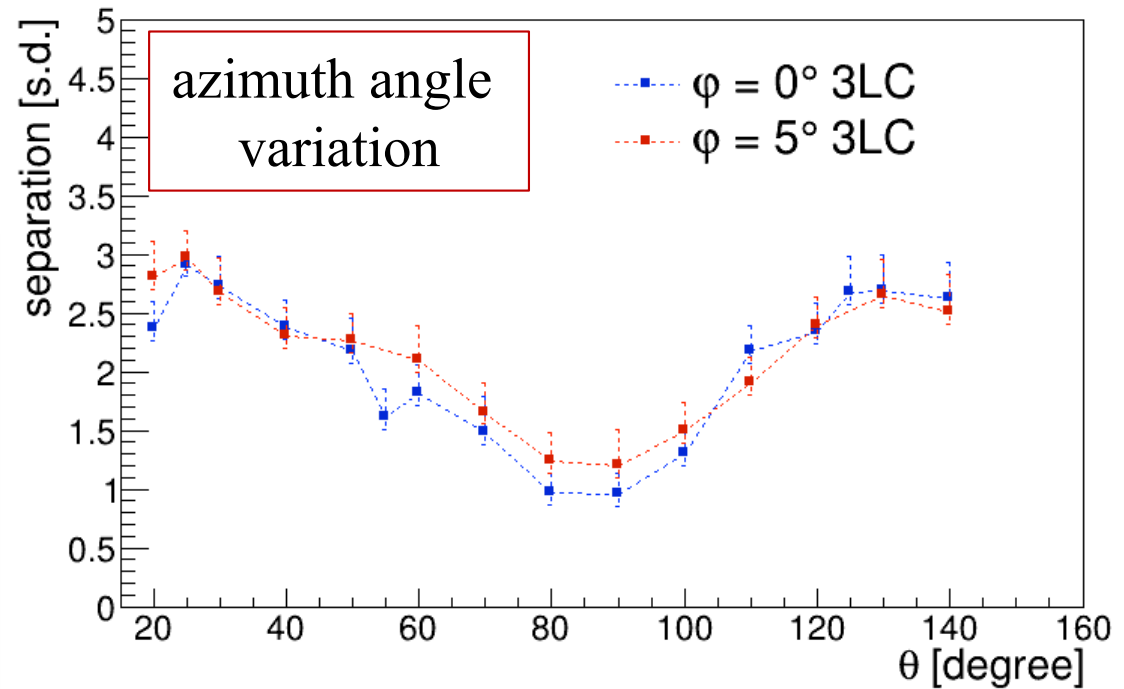


Photon yield and
 π/p separation power
 at 7 GeV/c

Same-day analysis (*yes, very prelim...*)

We successfully completed
 our measurement program

First impression:
 data quality looks good



This test beam was again very successful for the PANDA DIRC, lots of useful data to keep us busy for months.

A special thank you to

Henric, Lau, Michael J, and many others at CERN for their kind help and support; to our fellow East Area North users for the use of the hadron-rich target; and to the PS team for the excellent beam quality and the many extra spills.



Bye, au revoir, tot ziens, ciao, tschüss,
see you (hopefully) next year
for another PANDA beam test.