

# **PHENIX Run16 status**

## time meeting 06/07/2016

Denis Jouan

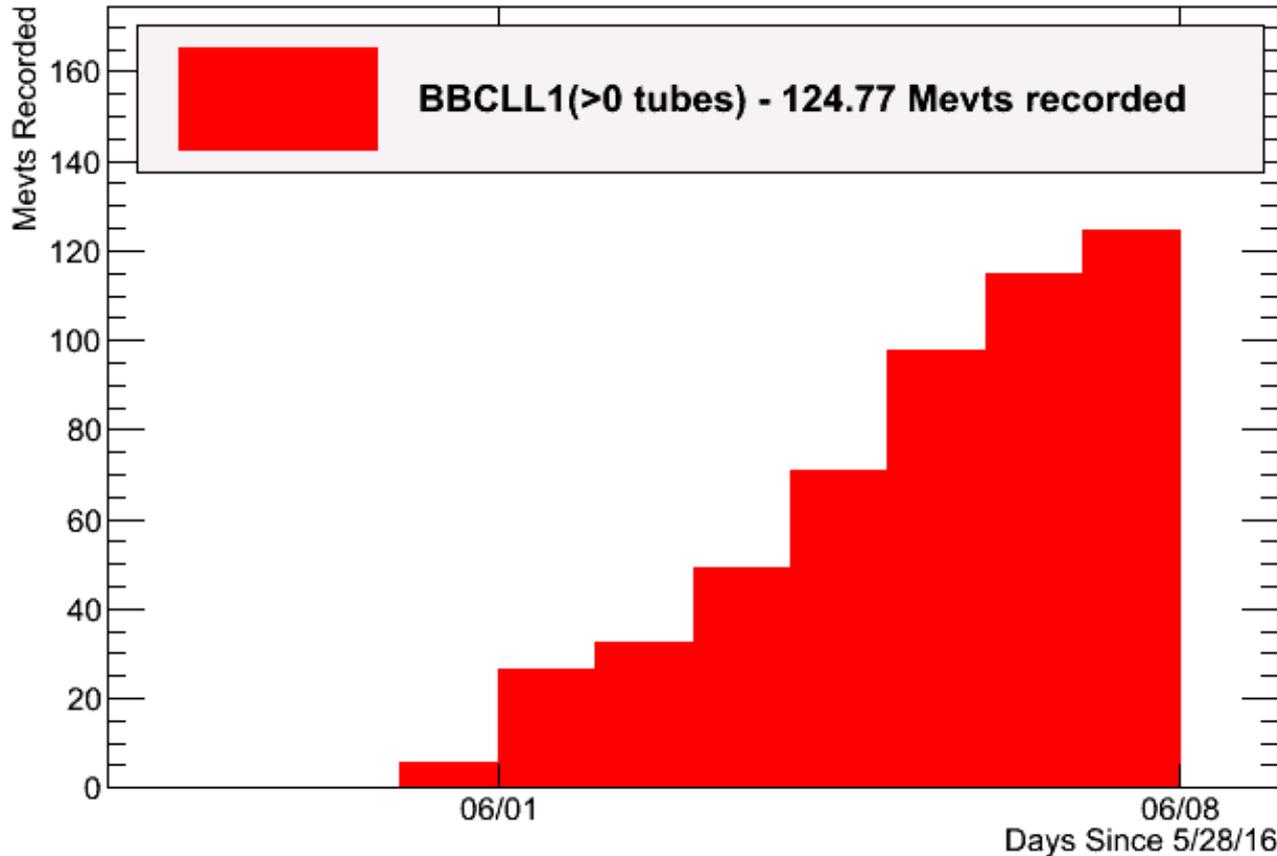
PHENIX Run 16 Coordinator

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# d-Au 20 : difficult measurement probably reach BUP goal

PHENIX Mevts vs Day

Tue Jun 7 12:00:12



124 Millions events  
For the « Minimum  
bias » (=all  
collisions) trigger  
*inside*  
ZV<30cm

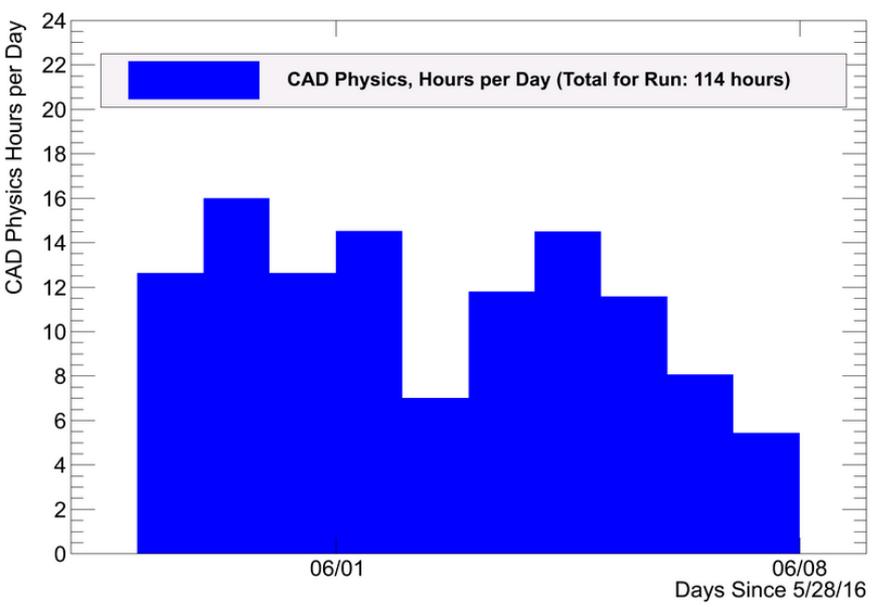
From offline quick  
analyses this might  
correspond to

-> **7 Millions events**  
5% most central  
collisions and  
ZV<10cm

And progress toward  
our updated 9M goal

### CAD Physics Hrs/Day vs Day

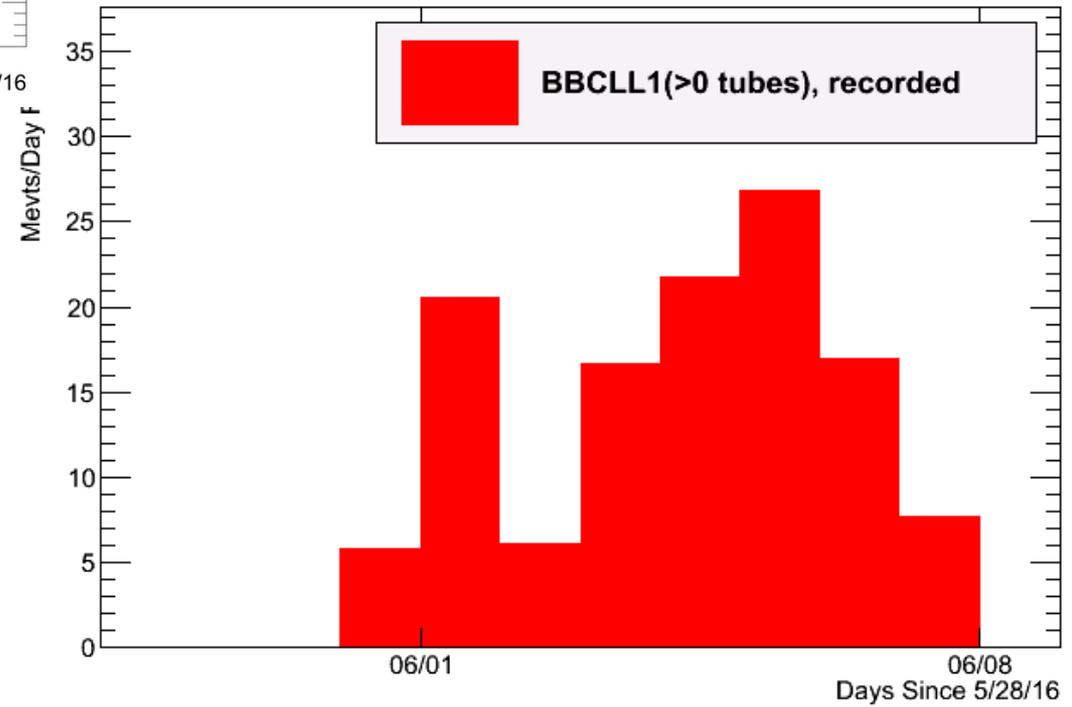
Tue Jun 7 10:00:26



For phenix, physics started on the 31 may (after memorial day)

### PHENIX Mevts/Day vs Day

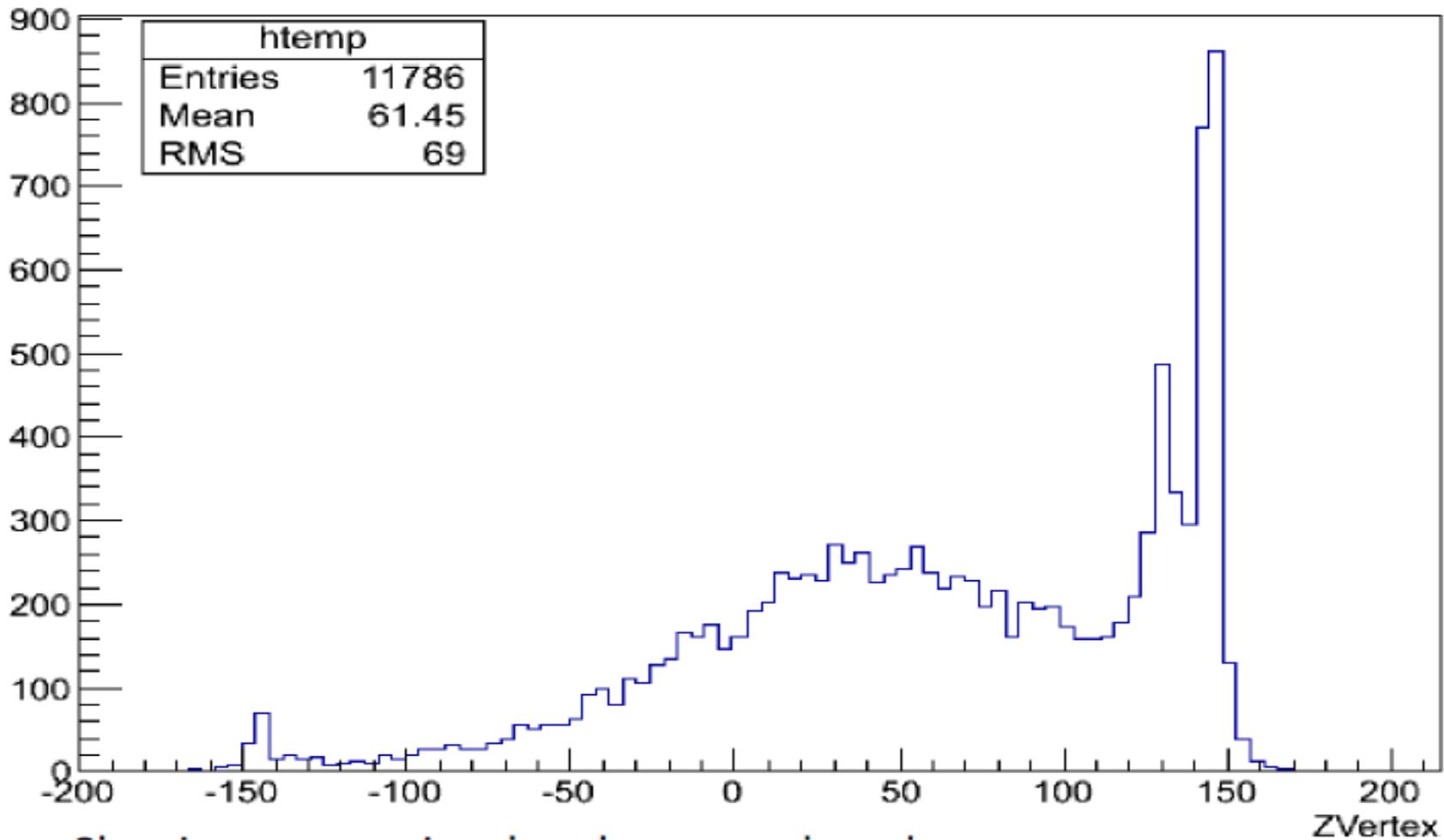
Tue Jun 7 09:00:13



# Despite of a difficult start

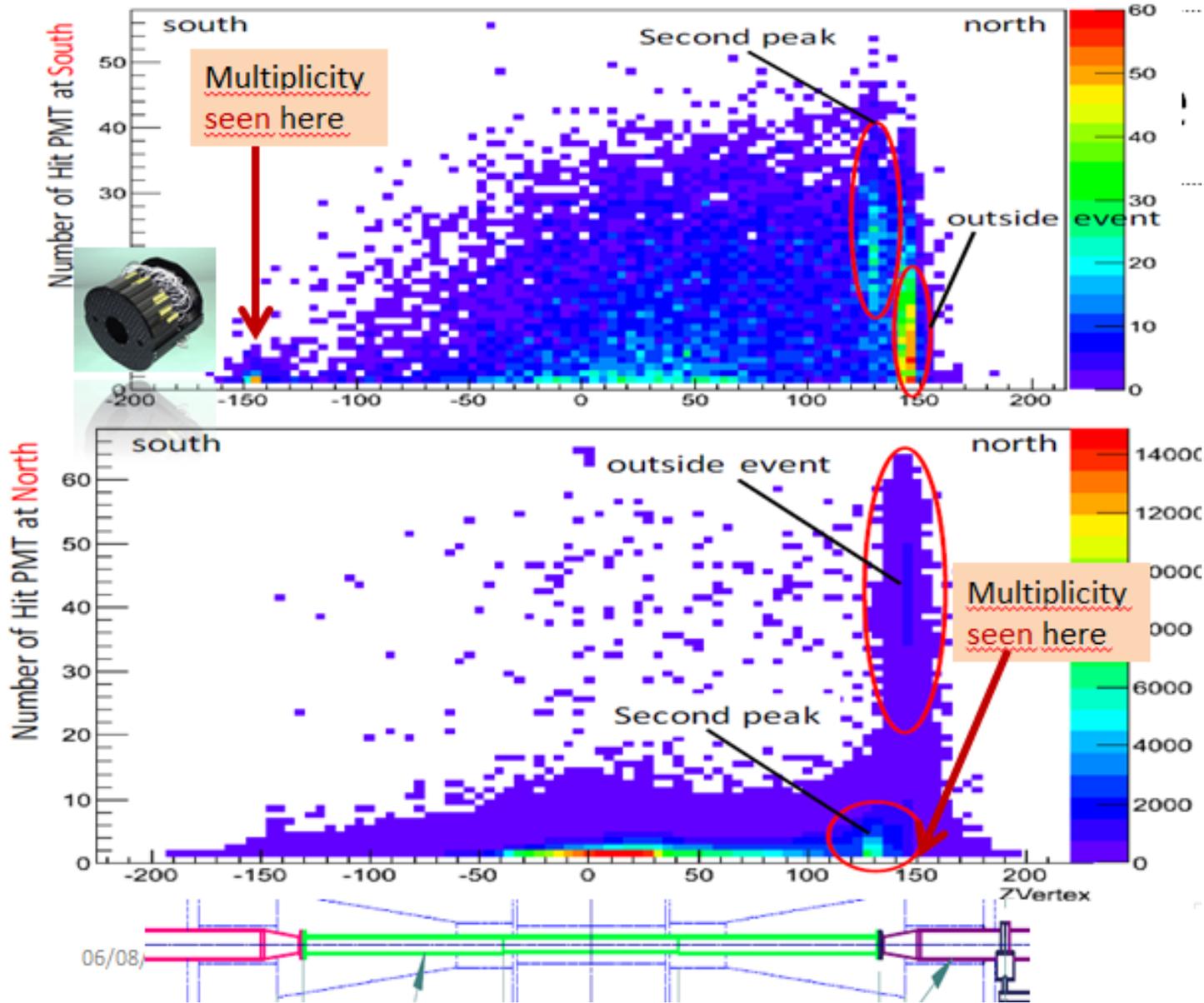
- Initially a bad timing up to tuesday , hidden behind background and peculiarities of 20 GeV (solved thanks to phenix (John) and MCR (Rob) additional expertize inputs)
- + consequences of smoke alarm shutoff (DC: ~Monday, TOF E tuesday, ... )
- Impossible to be sure of the rate of non background events in triggers: needs an offline reconstruction
- → first reasonably trustable estimate (rough) last saturday

# Illustration of the background difficulty



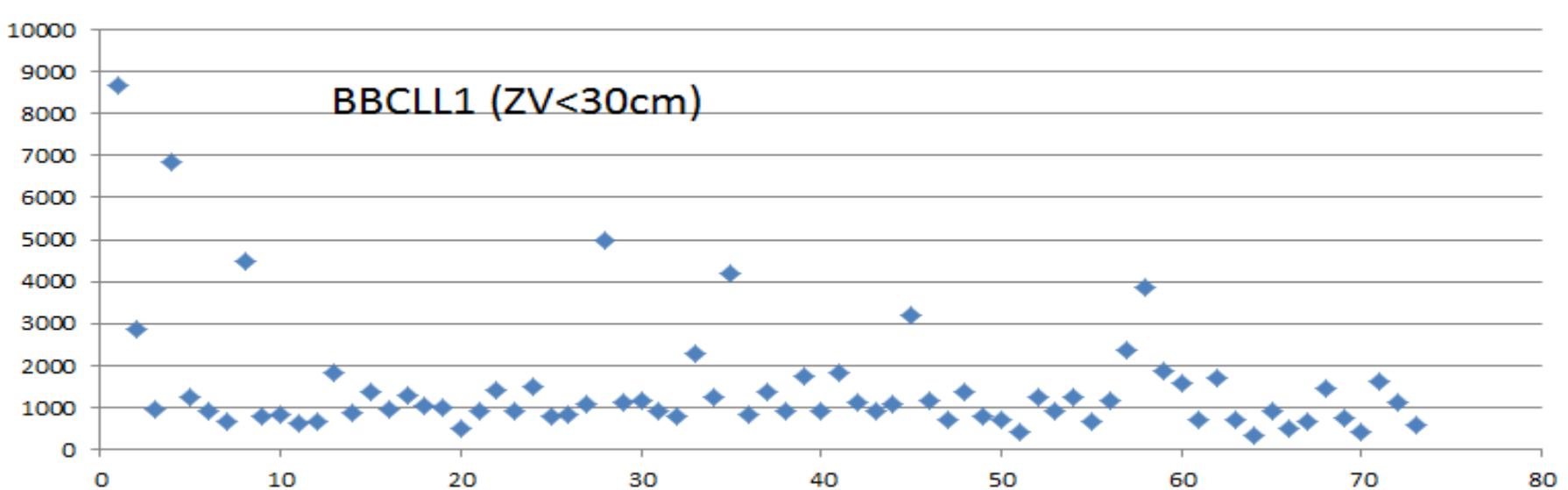
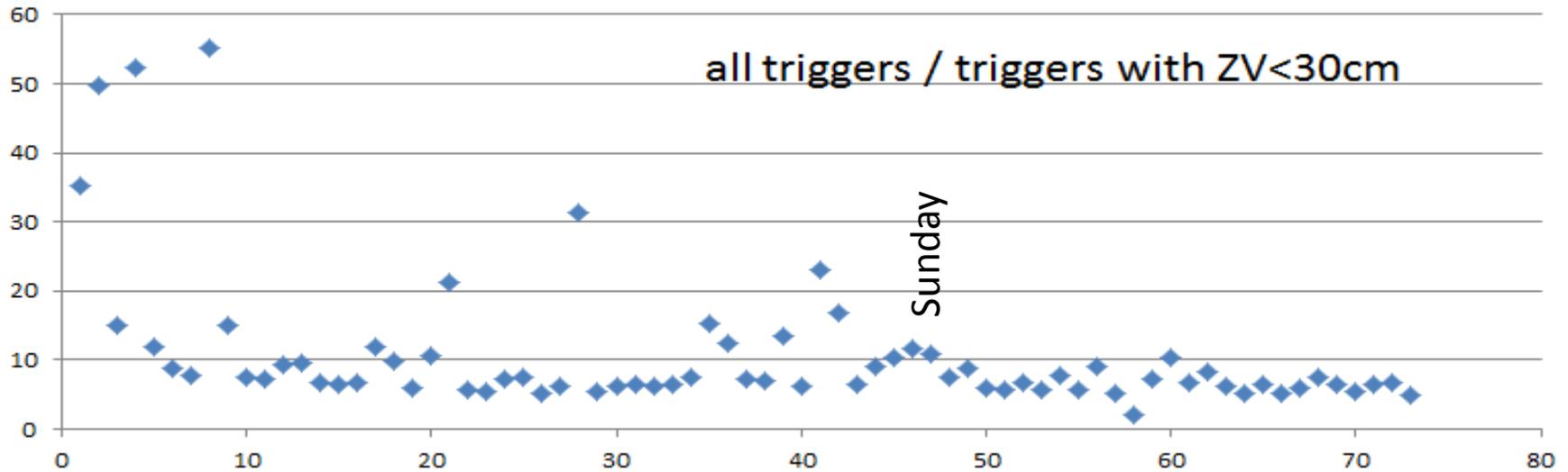
Run#: 456728, Trigger: BBLL1 novertex

d-Au  
20 GeV

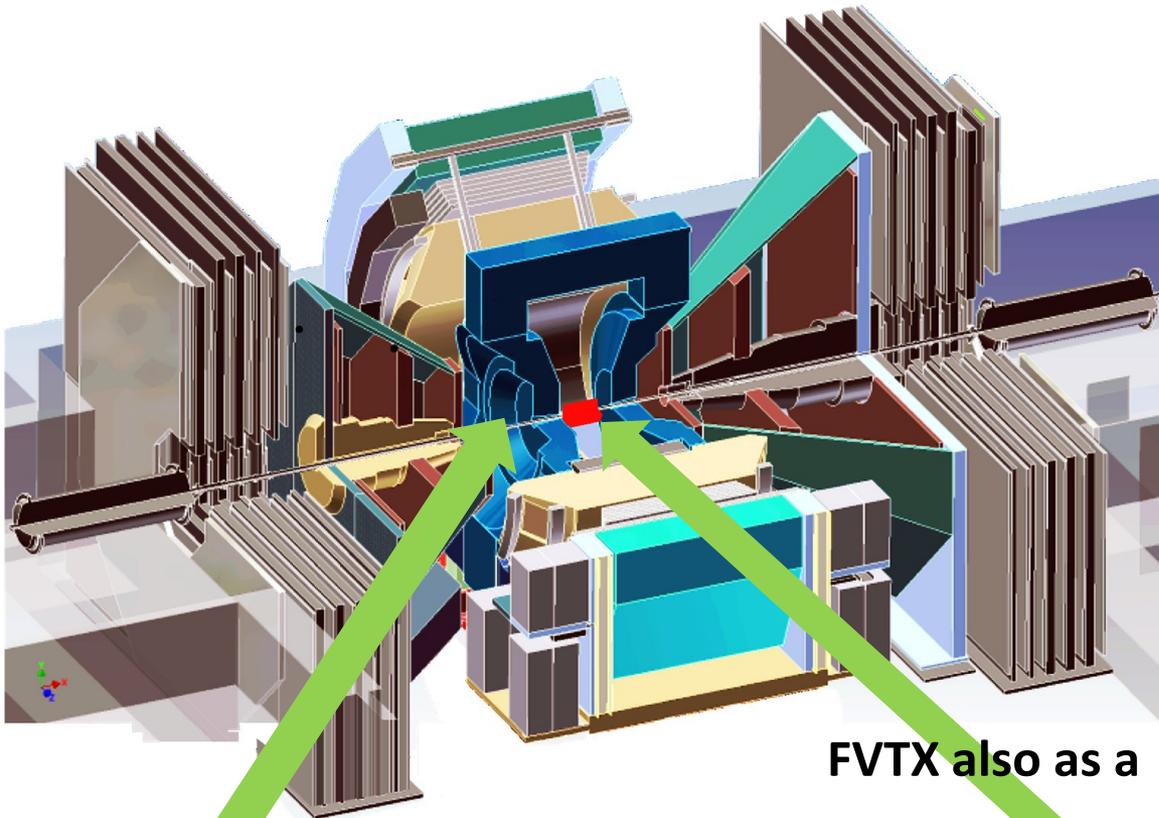


The peak at 130cm is probably a collision with North flange (high multiplicity in south)

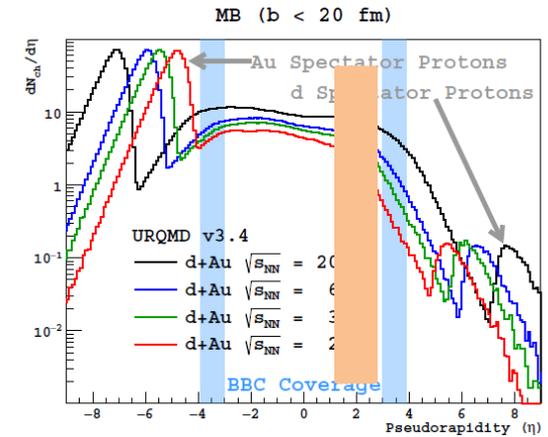
# Background more and more under control



# At 20 GeV FVTX sees multiplicity > 1



$3.1 < |\eta| < 4.$

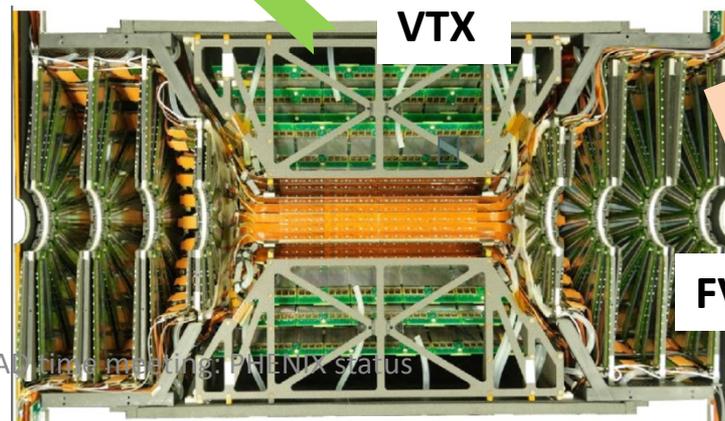


FVTX also as a trigger



BBC

64 Cherenkov quartz



VTX

FVTX

$1.2 < |\eta| < 2.7$

# Summary

- Difficult start, high backgrounds, but finally thanks to running up to Wednesday morning we will be between BUP goal and our updated goal. We should have a good sample of events at the analysis level for this lowest energy.
- The last period is improved regarding background, with maybe lower rates. Might be useful as low background sample.
- Conclusion: **dAu 20 GeV was a challenge, it is a success !!** Thanks to all !
- Next step: 39 GeV : do better (higher precision sample, at low energy) in less time