# THU2 cosmic test results (6)

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## Horizontal Test

Experiment 01 HV=1000V scintillator for trigger(up: 10cm\*5cm\*5cm down: 3cm\*3cm\*3cm)



Experiment 02 HV=1000V scintillator for trigger(up: 10cm\*5cm\*5cm down: 3cm\*3cm\*3cm)



Total Number of events 487

Npe

### Experiment 03 HV=1000V scintillator for trigger(up: 10cm\*5cm\*5cm down: 3cm\*3cm\*3cm)







# Gain of the PMT (SPE)

✓ Because we want to complete the scale of the gain and continue the cosmic ray test as soon as possible, so we finished this experiment at the IHEP in Beijing.

✓ Their research is development of the PMT for Jiangmen neutrino experiment, so they have a wealth of experience with the PMT gain scale



#### Calibration of Amplifier



x11 After adding the amplifier (110mv)



Before adding the amplifier (10mv)







### Summary

- The farther away from PMT, the smaller the NPE
- The efficiency of the detector in horizontal test all is about 93%
- The gain is obtained by NPE method. 2.2\*10<sup>6</sup> (1000V), 4.5\*10<sup>6</sup> (1100V)

## Next to do

◆ Now we have back to the vertical test and will get the Npe at 900V and 1000V.