THU2 cosmic test results (3)
Hamamatsu company told us the Gain of PMT we use is $2.1 \times 10^6$ (1000V). If it is reasonable, the Npe of THU2 for vertical cosmic test should be 1038. Now we’re still collecting data.

They want to help us to test the gain of this PMT. So I will bring this PMT to their company to test the Gain after I finishing this test.
X = 2810 (1100V)

Y: number of events

X: Npe*Gain*10^{-6}

Npe = X / Gain * 10^{-6}
\[ X = 3610 \text{ (1200V)} \]

\[ Y: \text{number of events} \]

\[ X: \text{Npe} \times \text{Gain} \times 10^{-6} \]

\[ \text{Npe} = \frac{X}{\text{Gain}} \times 10^{-6} \]
X = 4300 (1300V)

Y: number of events

X: Npe*Gain*10^{-6}

Npe = X/Gain*10^{-6}
$X = 4880 \text{ (1400V)}$

$Y$: number of events

$X$: Npe*Gain*10^{-6}$

$Npe = \frac{X}{\text{Gain}} \times 10^{-6}$
Clear fiber test
Clear fiber
Convex lens (facular)
Filter sheet (531nm)
spectroscope
Laser source (white light)
We want to use black tape to prevent light leakage. However, Convex lens would be moved when we change the length of the fiber again and again. We found that the signal of 6m is smaller than 7m. So the result is not reasonable. I will do this test again after I improving the set up.
Thank you !!!