

# Status report #7

2019.12.05 (Thu)

B4 T. FUJIWARA

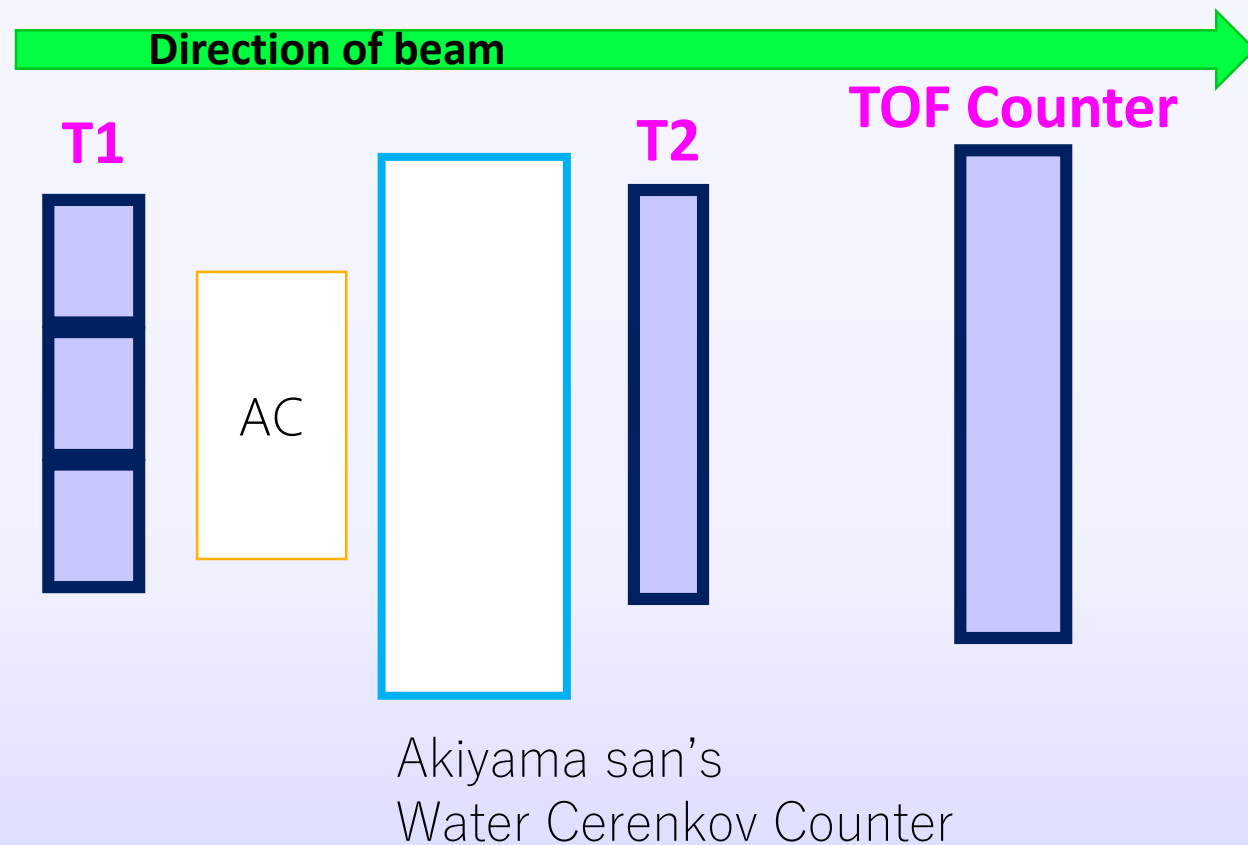
- Presentation at detector seminar
- Writing “宇宙論” Mid-term report
- JPS entry
- Prepare for test beam at ELPH

- Final title:

Japanese: ELPHにおける $\Lambda$ ハイパー核実験のための新TOF検出器の開発

English: Development of new TOF counter for the experiment of  $\Lambda$  hypernuclei in ELPH

- My task: T1, T2 trigger and TOF counter



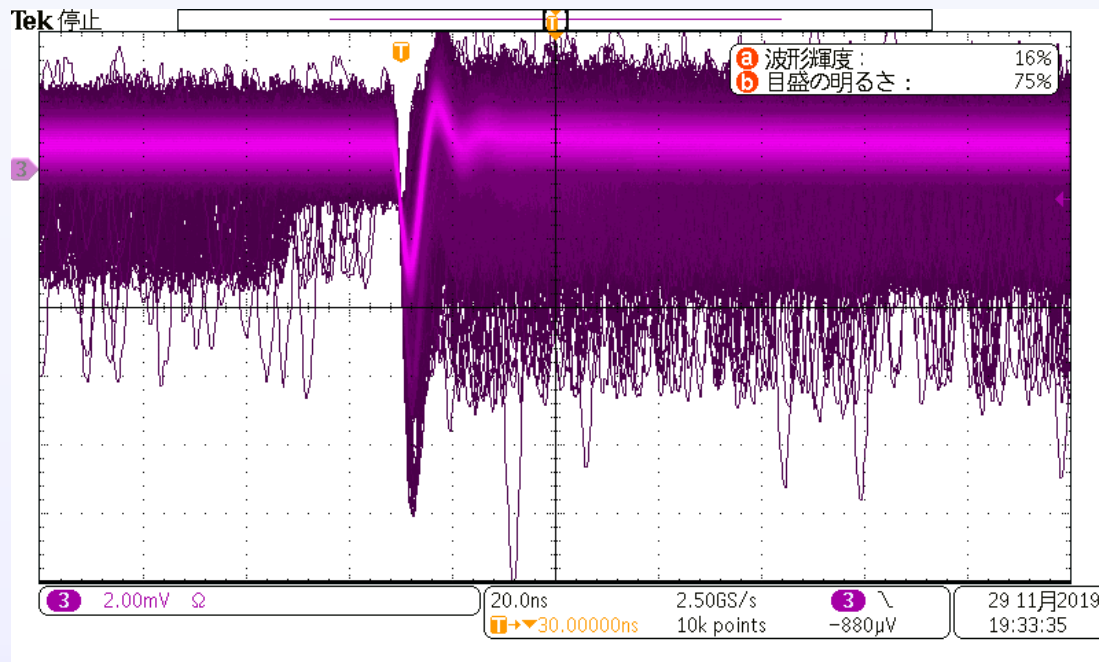
This week's task list (by Nagao san)

- Complete T1 & T2
- Modifying  $V_{th}$  using  $\beta$ -ray source
- Setting at test bench
- Setting trigger
- Gathering data of cosmic ray

# Prepare for test beam at ELPH -2-

4

- T1-1



←1photon pulse shape of T1-1

\*) Trigger : -880μV

\*) Voltage: 56.0V

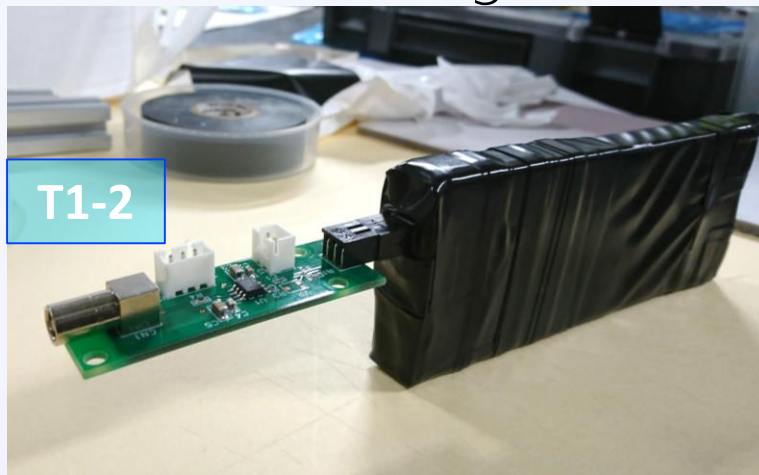
\*) 1 photon ~3mV

# Prepare for test beam at ELPH -3-

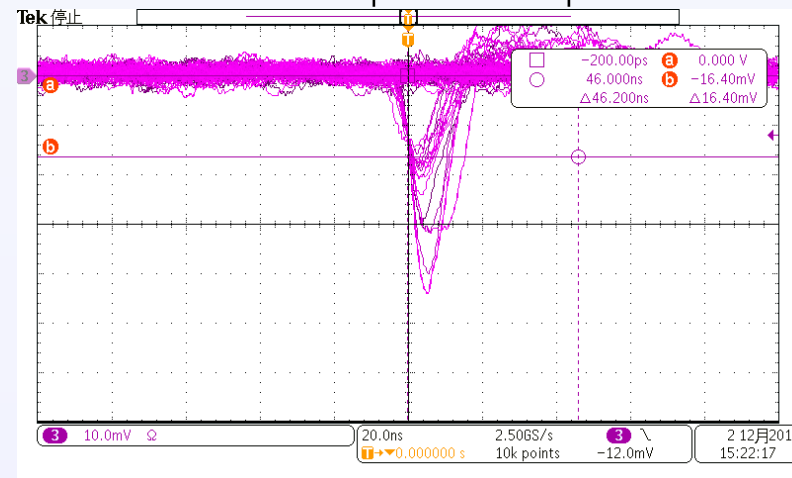
5

## T1-2 & T1-3

- Finished mounting MPPC



- Check the photon pulse of T1-2, T1-3

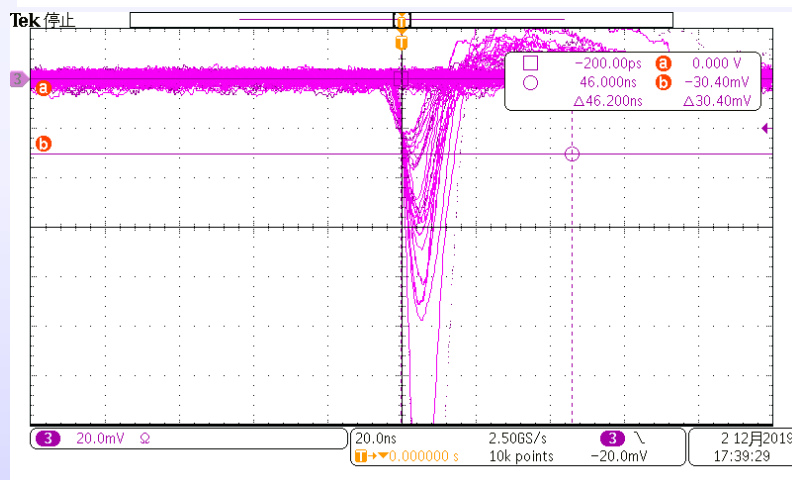


←1photon pulse shape of T1-2

\*) Trigger : -12.0mV

\*) Voltage: 56.0V

\*) 1 photon ~16mV



←1photon pulse shape of T1-3

\*) Trigger: -20.0mV

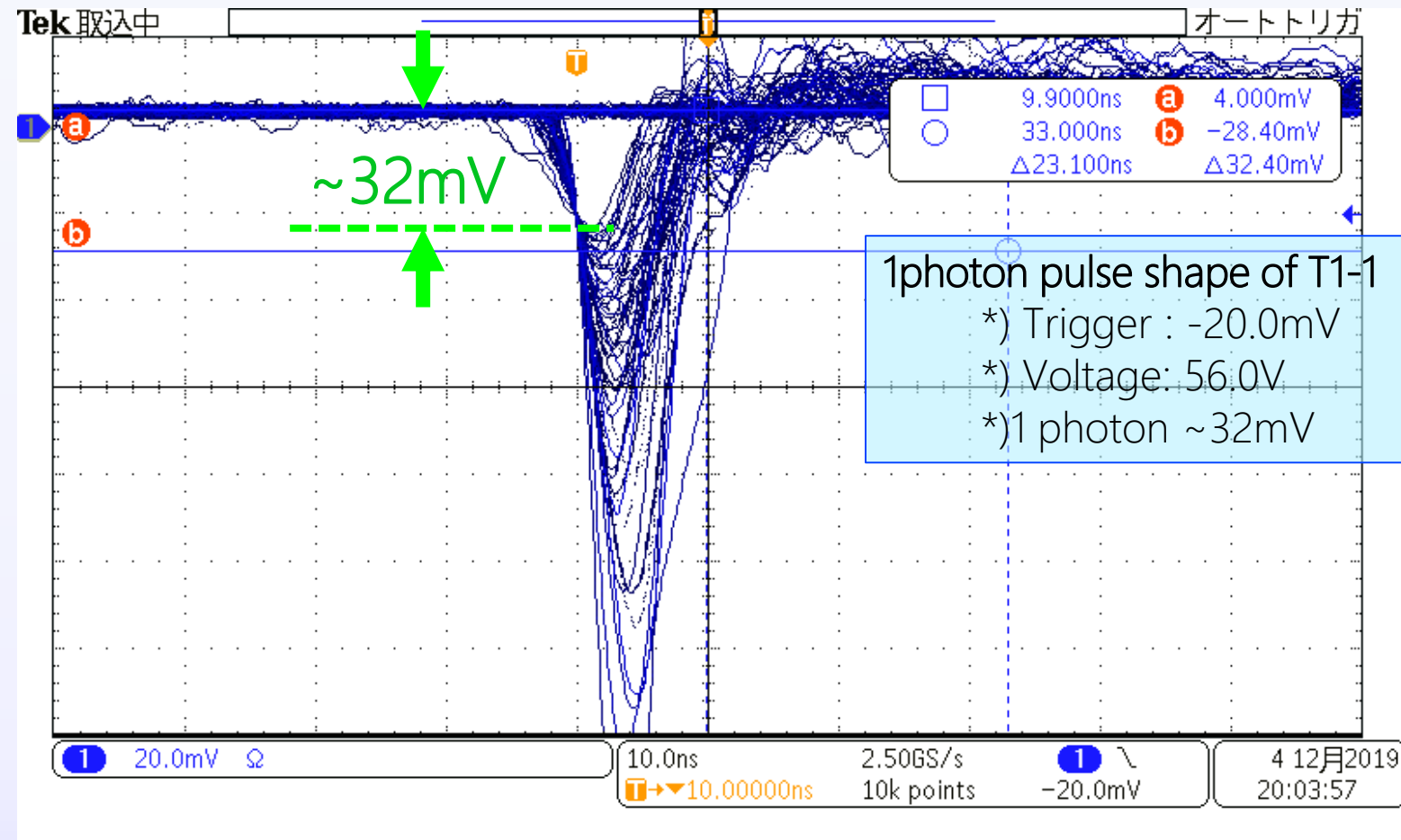
\*) Voltage : 56.0V

\*) 1 photon ~26mV

# Prepare for test beam at ELPH -4-

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T2



- Modifying  $V_{th}$  using  $\beta$ -ray source
- Setting trigger at test bench: (T1-1||T1-3||T1-3) && T2
- Gathering data of cosmic ray
- Making TOF Counter ➡next week
- B4 seminar