

Status report

Tokyo University of Science

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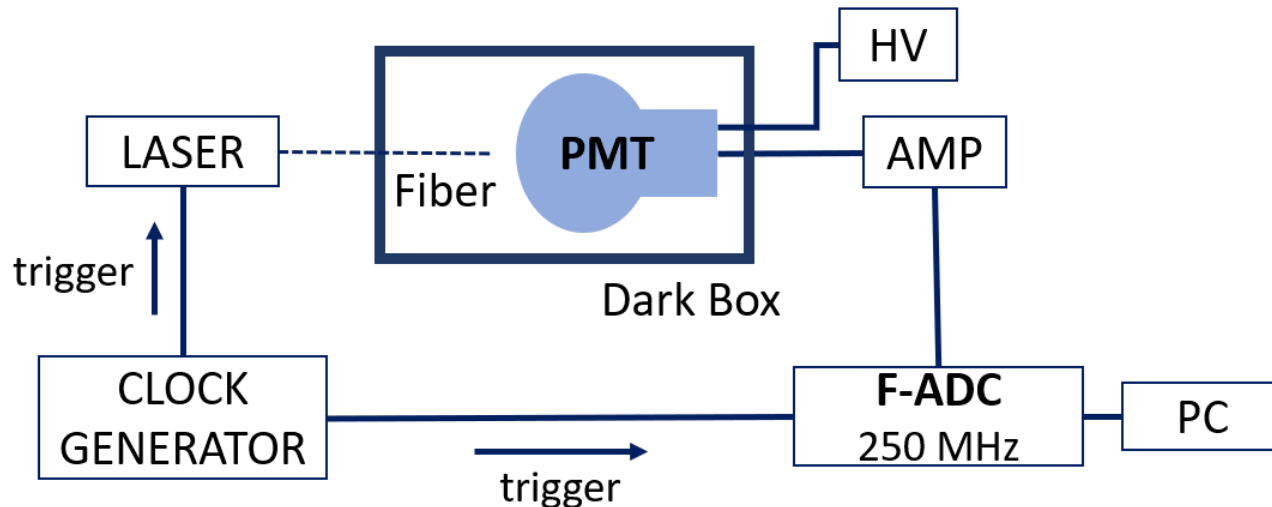
mPMT meeting

This week

- I checked the after pulse fraction again with another Hamamatsu's PMT.

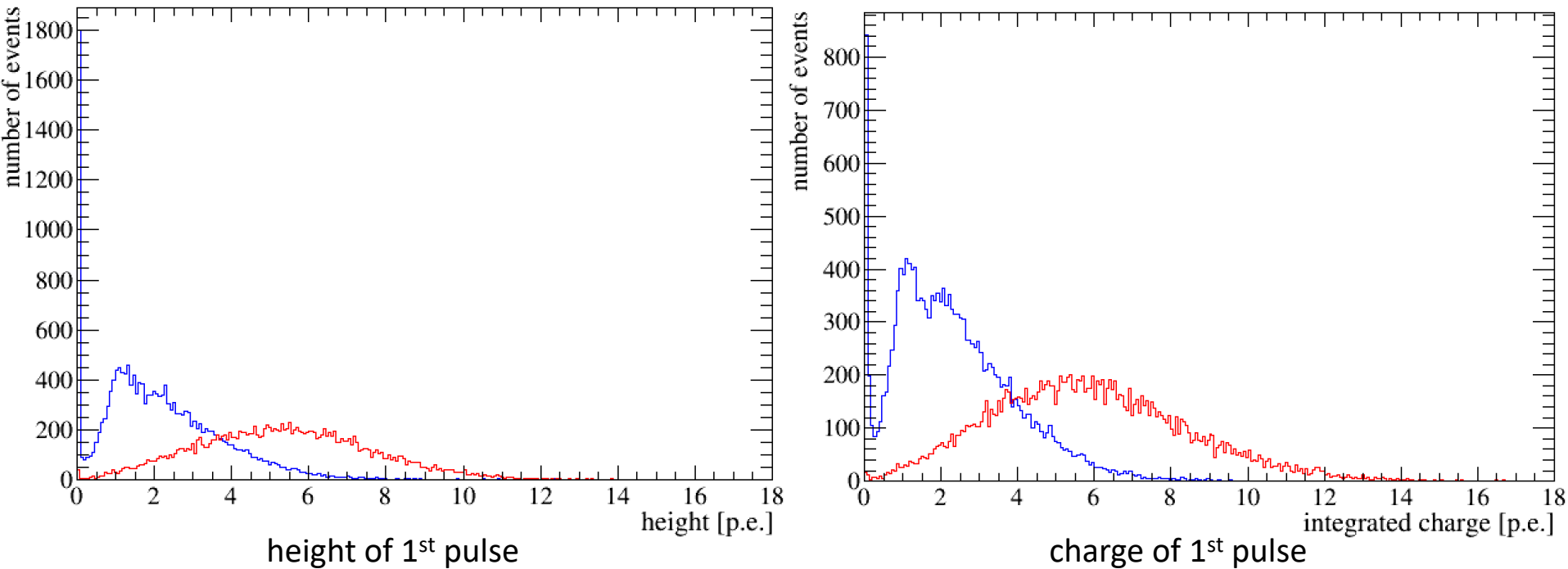
Setup

- I illuminated PMT with laser for two kinds of intensity, and measured by using F-ADC.



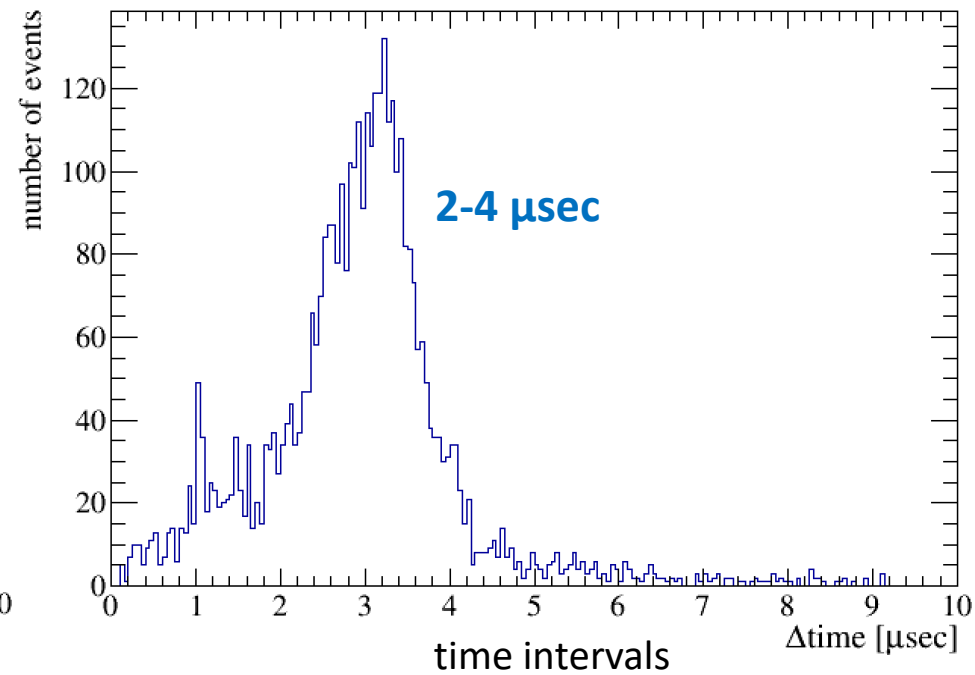
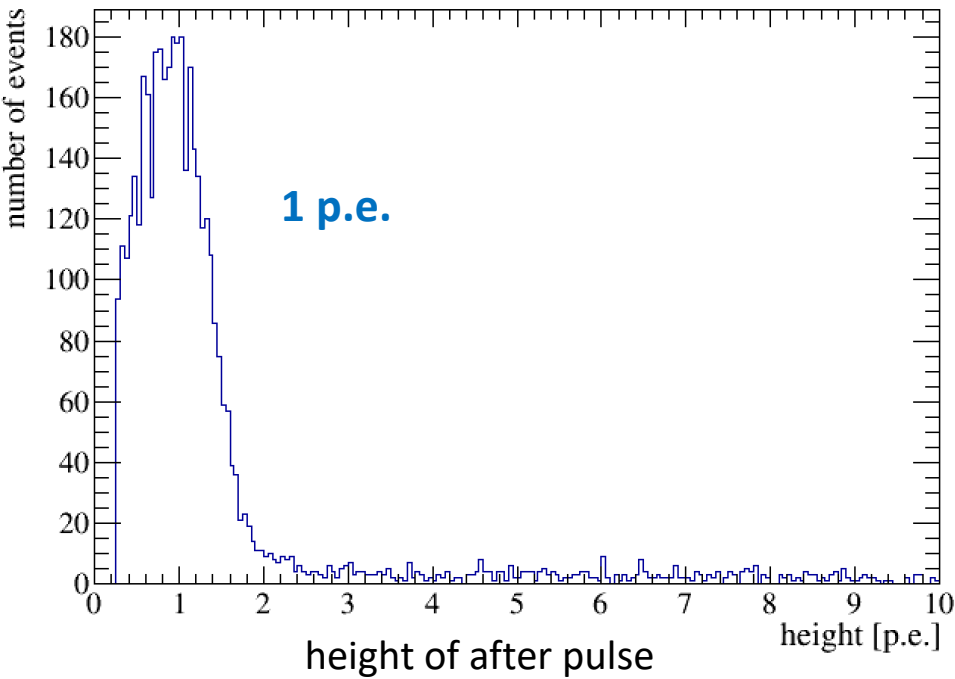
- HV = -1400 V
- Threshold = 0.25 p.e.

1st pulse (laser signal)



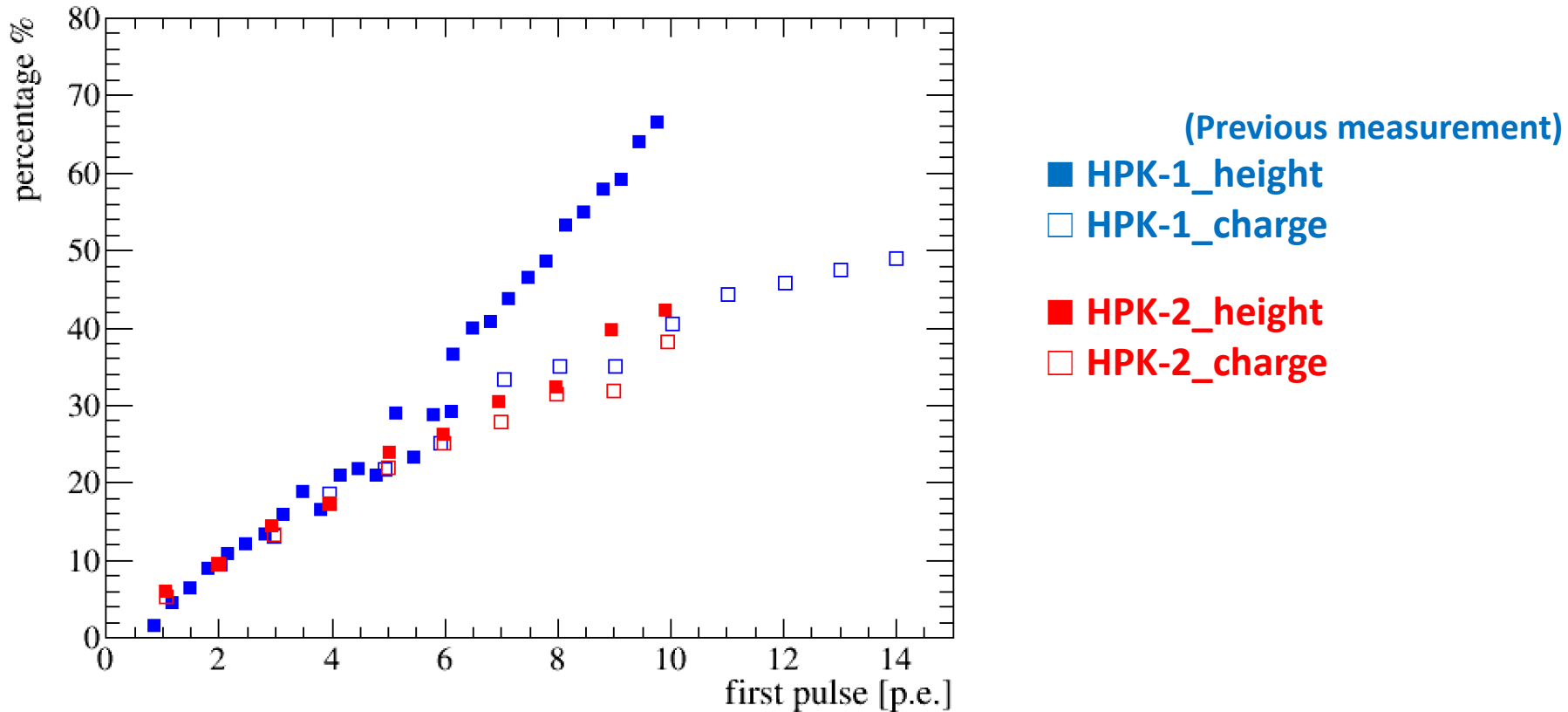
- These histograms show the height and charge distribution of 1st pulse.
 - Blue one: low intensity of laser
 - Red one: high intensity

after pulse



- I checked the same characteristics of previous measurement.

Fraction of after pulse occurrence



- The same tendency with previous measurement was observed.
 - Fraction of after pulse occurrence is proportional to pulse height (or related to integrated charge).

Future plan

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Back up :

Charge-fraction

	ave p.e.	# of events with 1 st pulse	# of events with after pulse	fraction
low	1.05	4462	239	5.4
	1.99	4469	429	9.6
	2.96	3238	431	13.3
	3.94	1953	337	17.3
high	5.00	2797	615	22.0
	5.99	2792	704	25.2
	6.98	2326	646	27.8
	7.97	1754	552	31.5
	8.98	1146	366	32.0
	9.95	750	286	38.1

Back up :

Height-fraction

	ave p.e.	# of events with 1 st pulse	# of events with after pulse	fraction
low	1.06	4793	285	5.9
	1.98	4561	435	9.5
	2.95	3171	458	14.4
	3.94	1881	326	17.3
high	5.01	3188	761	23.9
	5.99	2948	772	26.2
	6.96	2381	723	30.4
	7.97	1485	479	32.3
	8.94	825	328	39.8
	9.92	428	181	42.3

