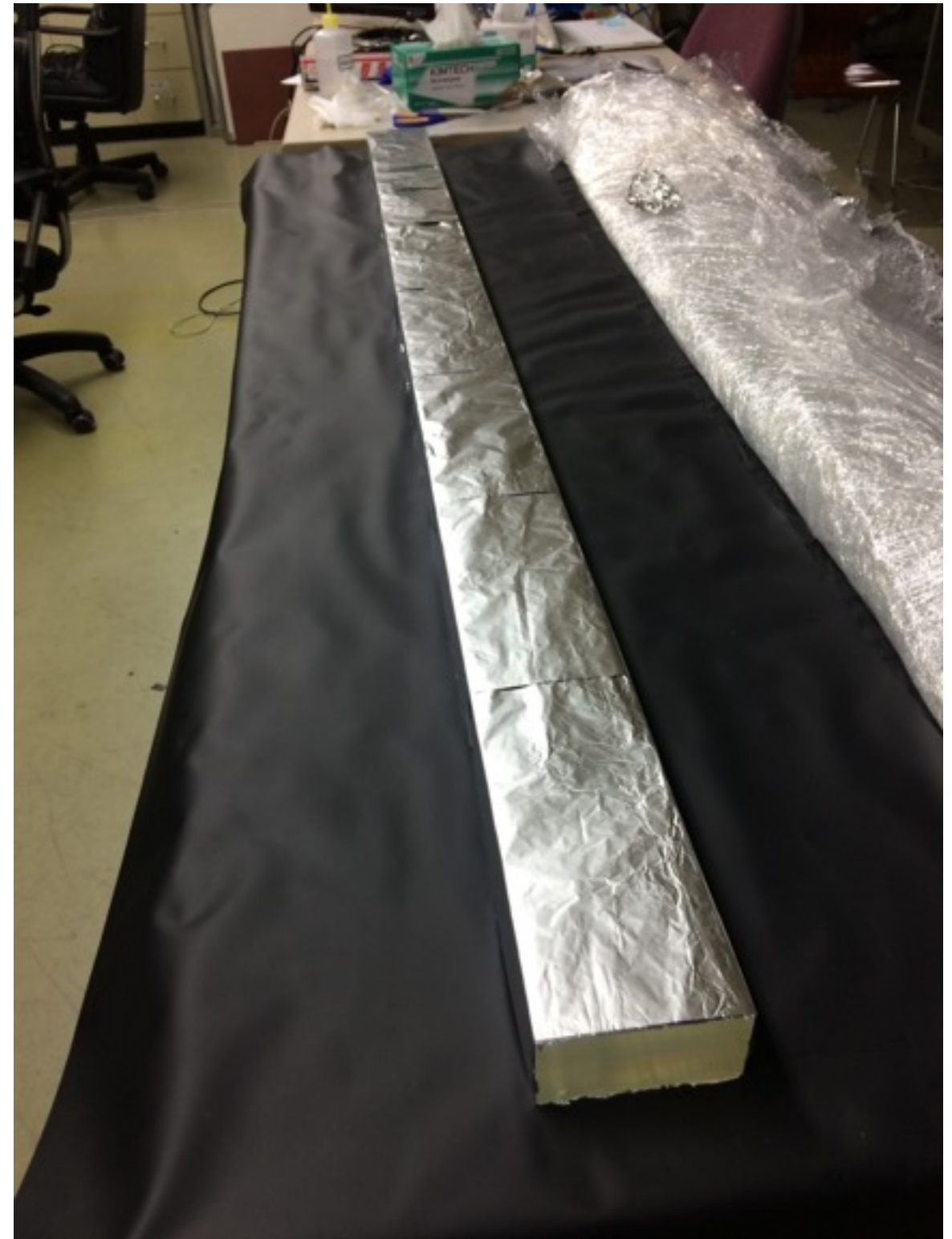
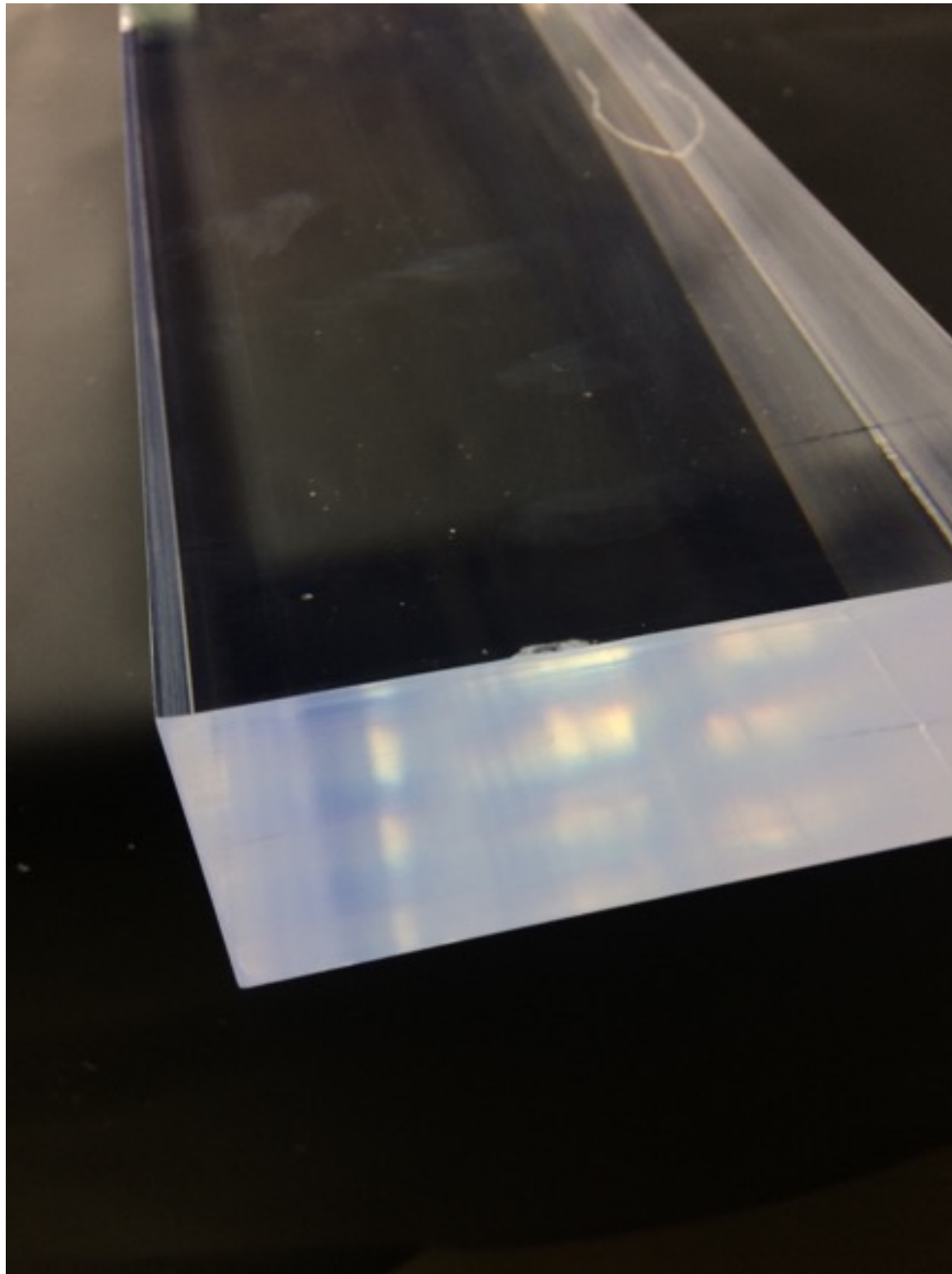


GBAR Meeting (SNU)

(5 July 2016)

Jongwon Hwang

Another bar of plastic scint.

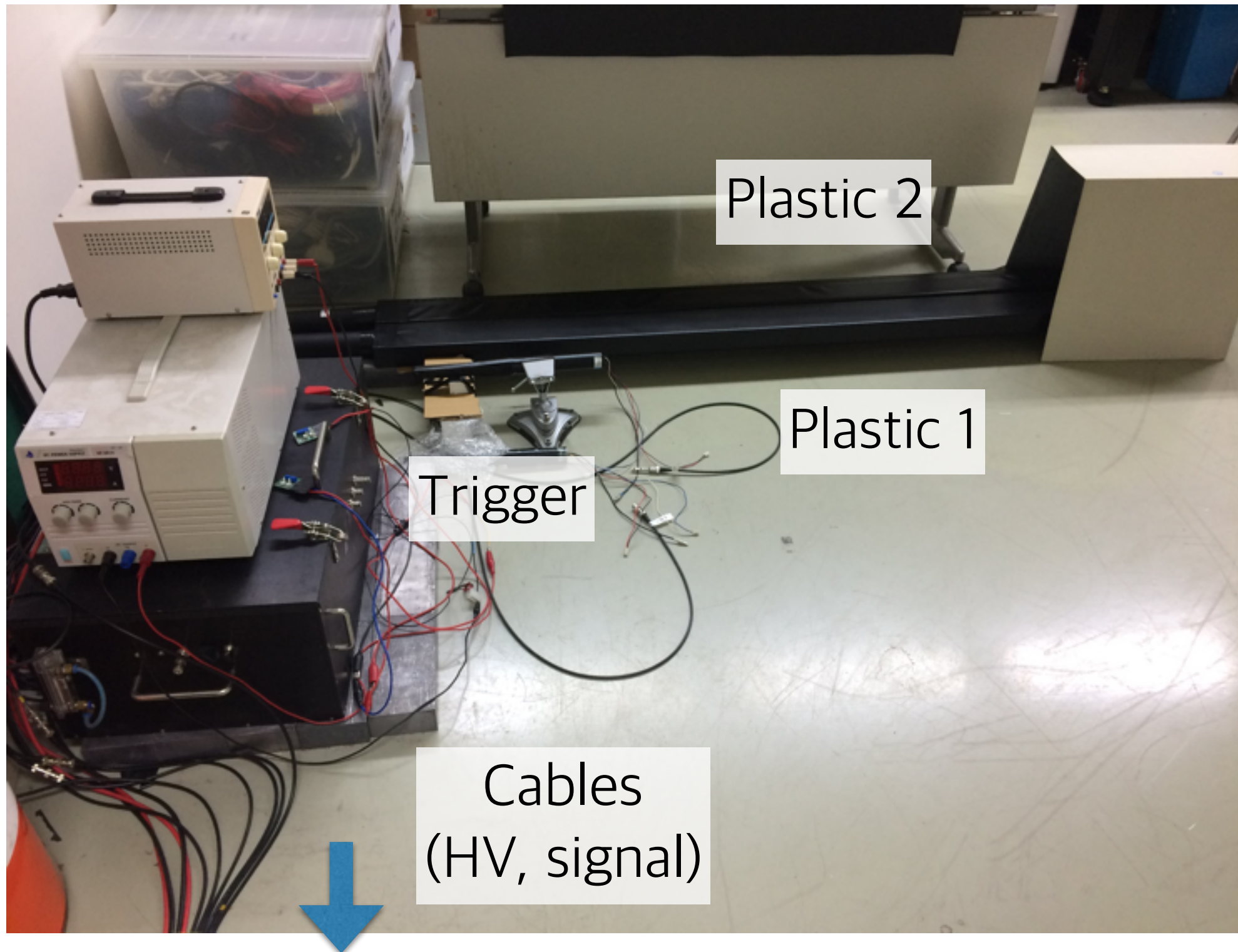


Another bar of plastic scint.

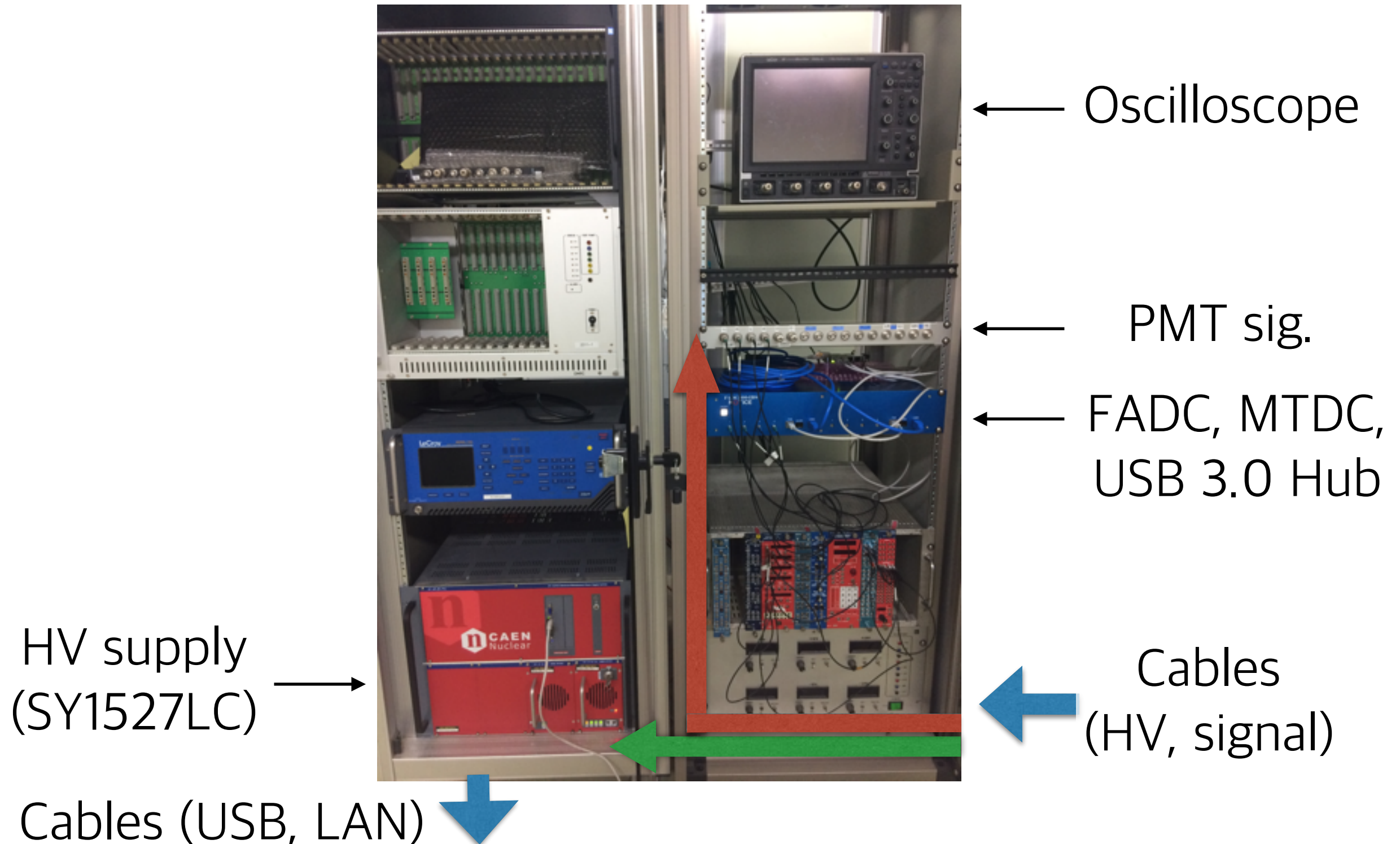


- Use the same way as the previous one
- Al foil (two layers)
No foil on both edges
- Black sheet and tape
- PMT (H7195, 6cm in diameter, brought from 405, bought by Sato)
- Check light leakage
- **Fortunately, the PMT is NOT dead.**

Experimental setting



Experimental setting



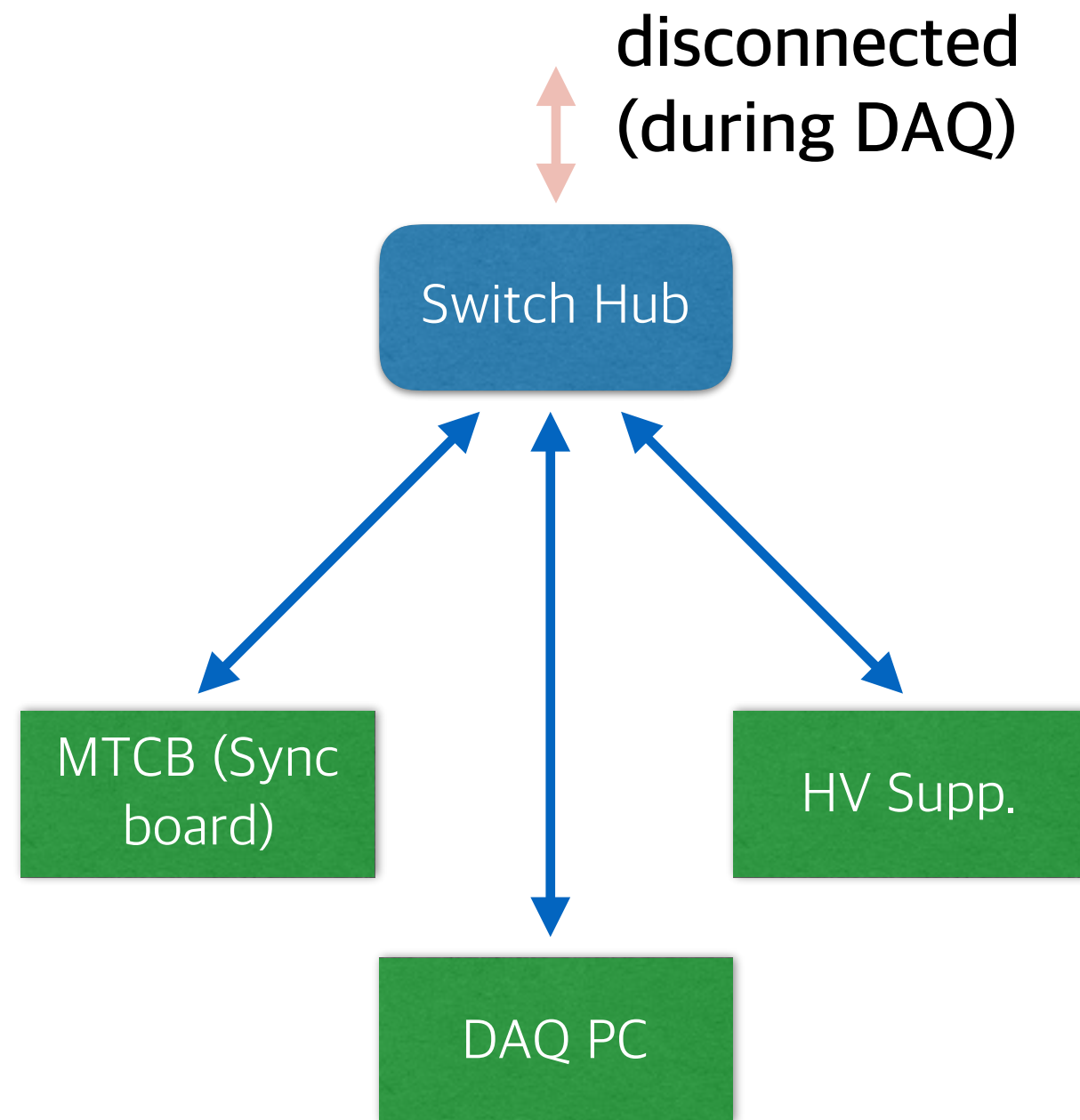
New HV supplier (SY1527)

- CAEN SY1527LC with four boards of negative HV modules (12 ch for each, 4 kV – 3 mA)
- Checked the operation. Okay.
- Connected to the PMTs (4 ch). Works.
- Power requirement: ~ 3,400 W
It should occupy a whole single electric connect on the wall (max 15A).
- Now, operated remotely by 'telnet' network (192.168.0.152:1527)



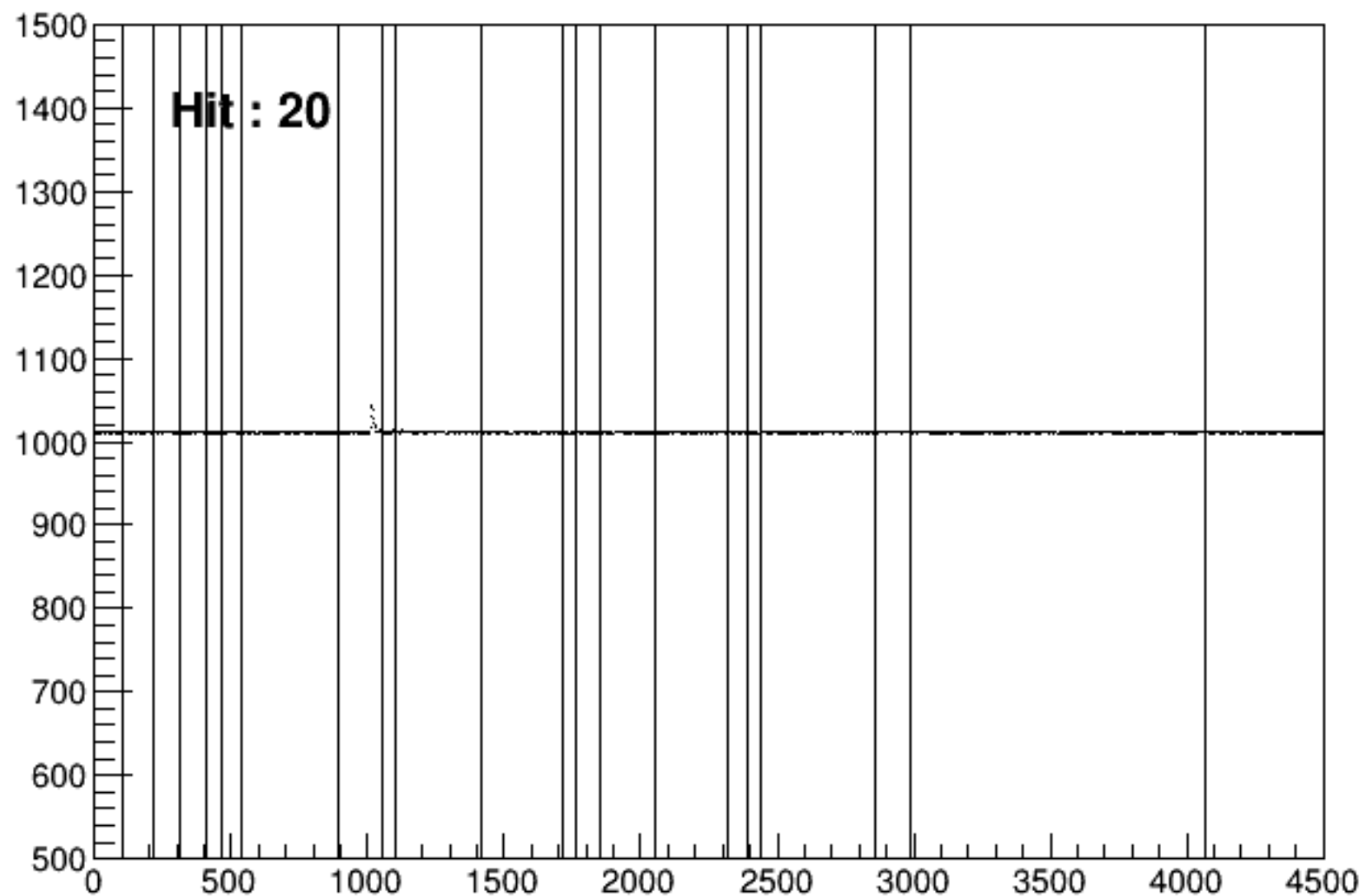
Closed sub-network

- Using a switch hub, made the closed sub-network for DAQ with FADC
- MTCB (192.168.0.2)
DAQ PC (192.168.0.99)
HV Supp. (192.168.0.152)
- You can connect to the external network by wired connection between the switch hub and the external router.



TDC Issue #1: Threshold

- Take the data with the smaller TDC threshold (20)



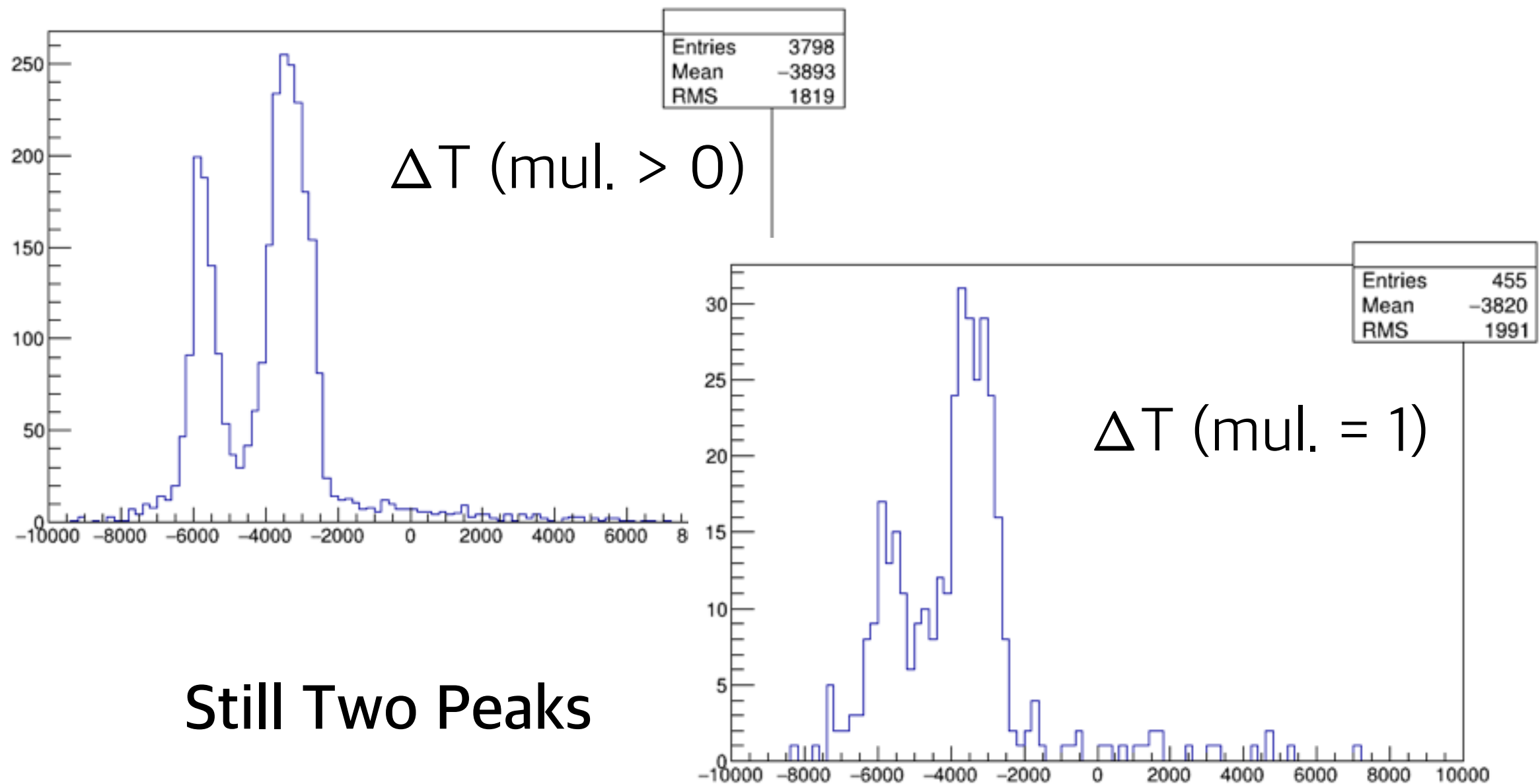
Waveform
with TDC hits

more than
20 hits

'200' in TDC seems to correspond to '20' in ADC.

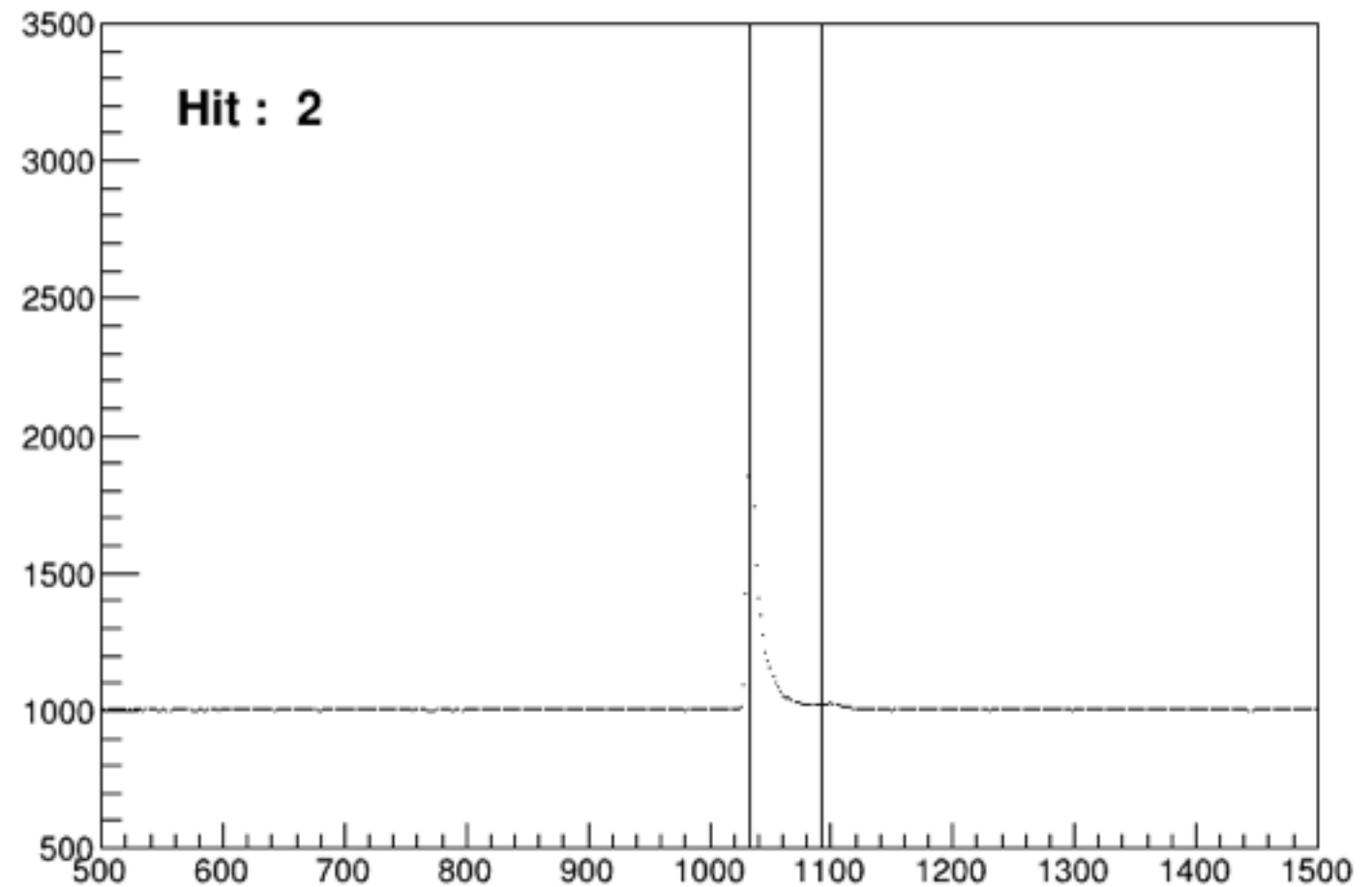
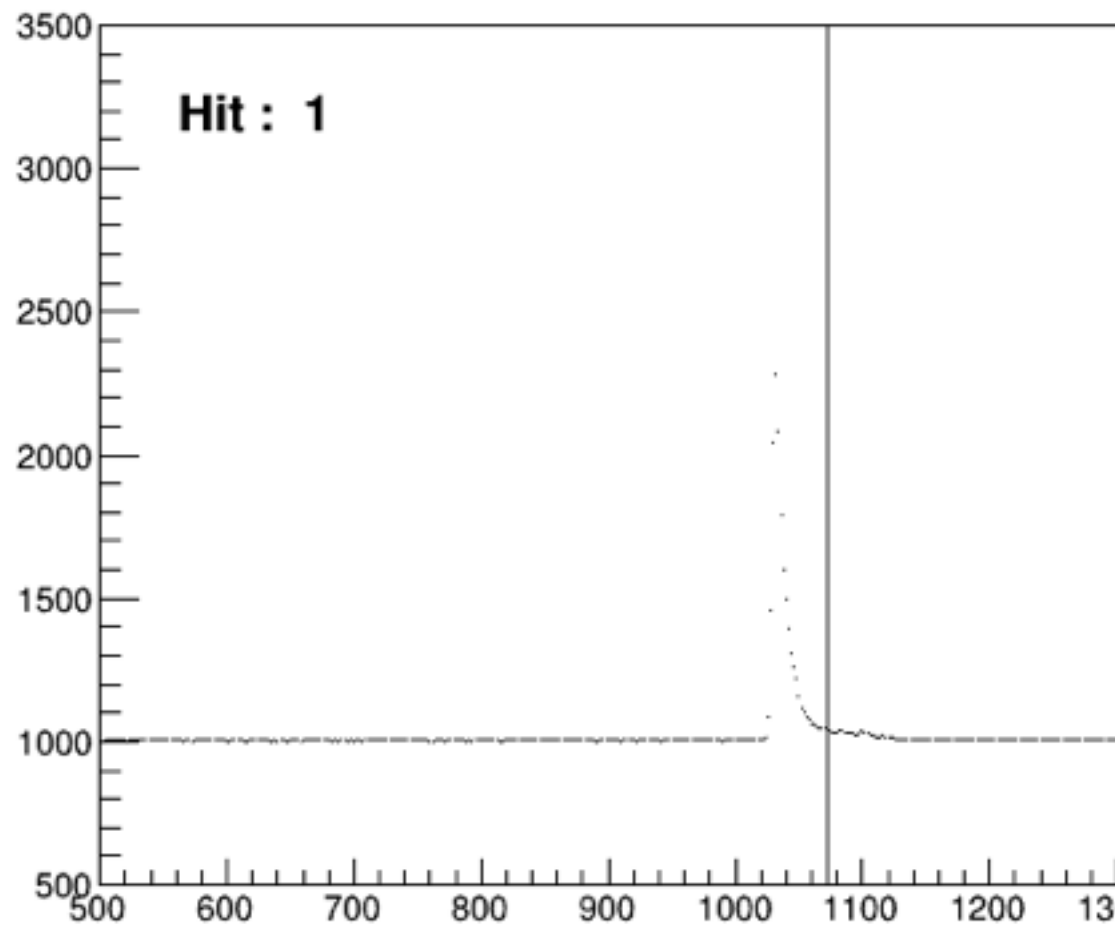
TDC Issue #2: Double peak

- Check TDC according to the multiplicity of TDC hits



TDC Issue #2: Double peak

- More check for each waveform



TDC Issue #2: Double peak

$T(\text{TDC}) - T(\text{WAVE})$

