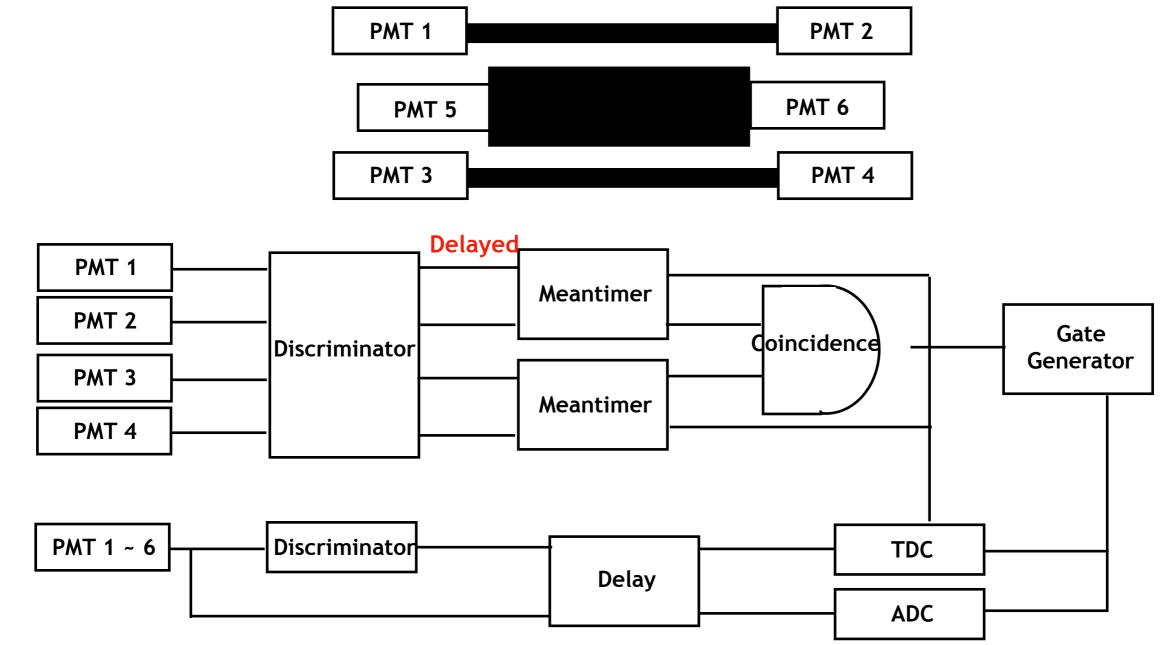
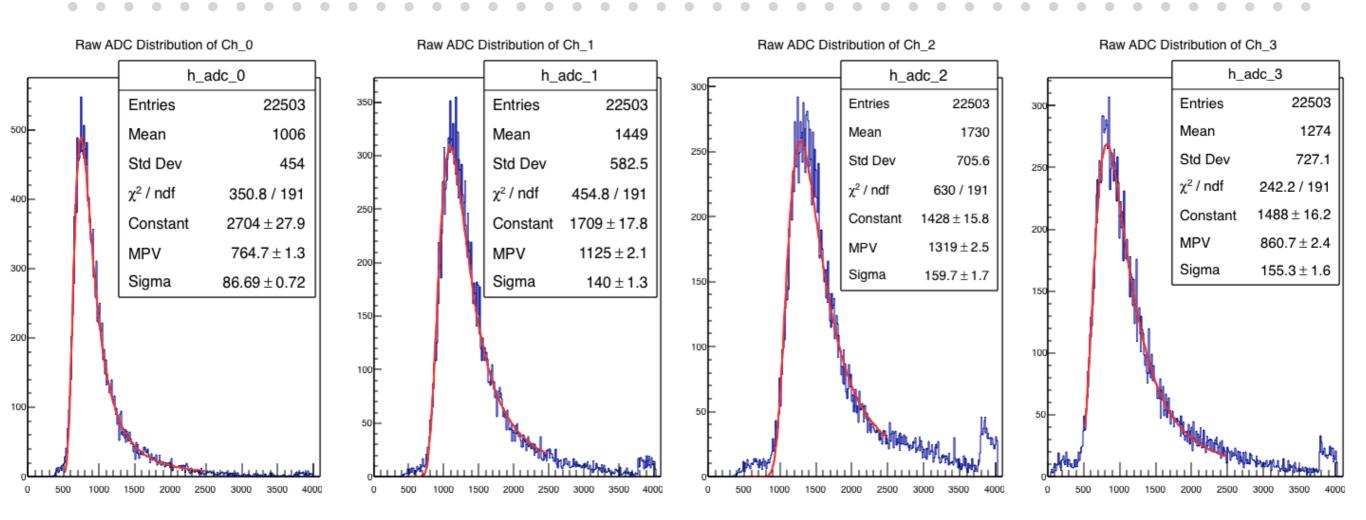
# Cosmic-ray Test Setup

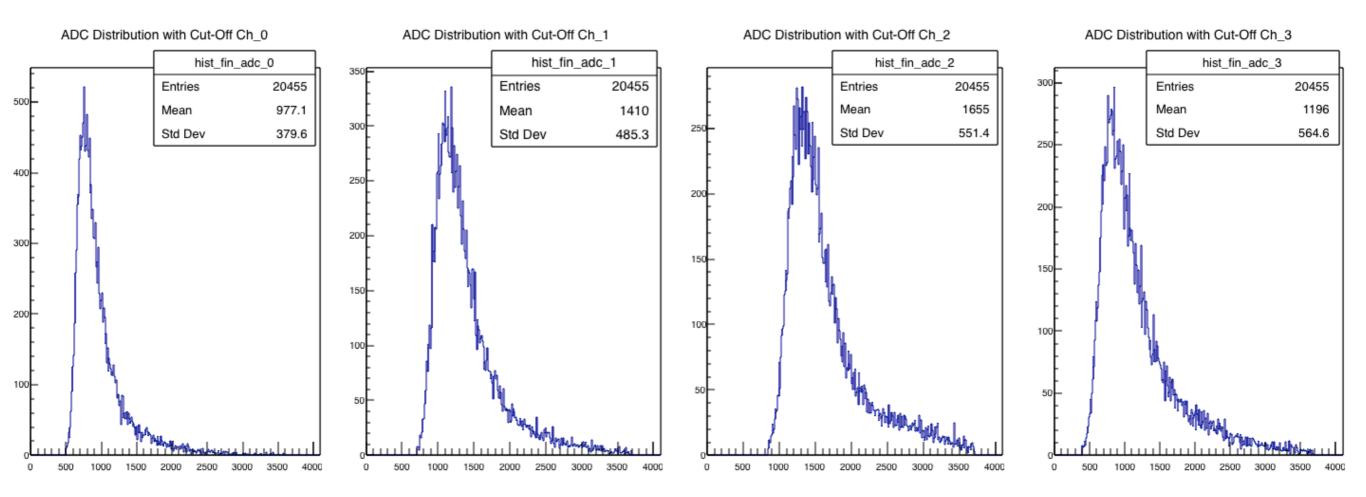


• PMT1 : Reference Timing (Intentionally more delayed (10 ns) to determine the timing

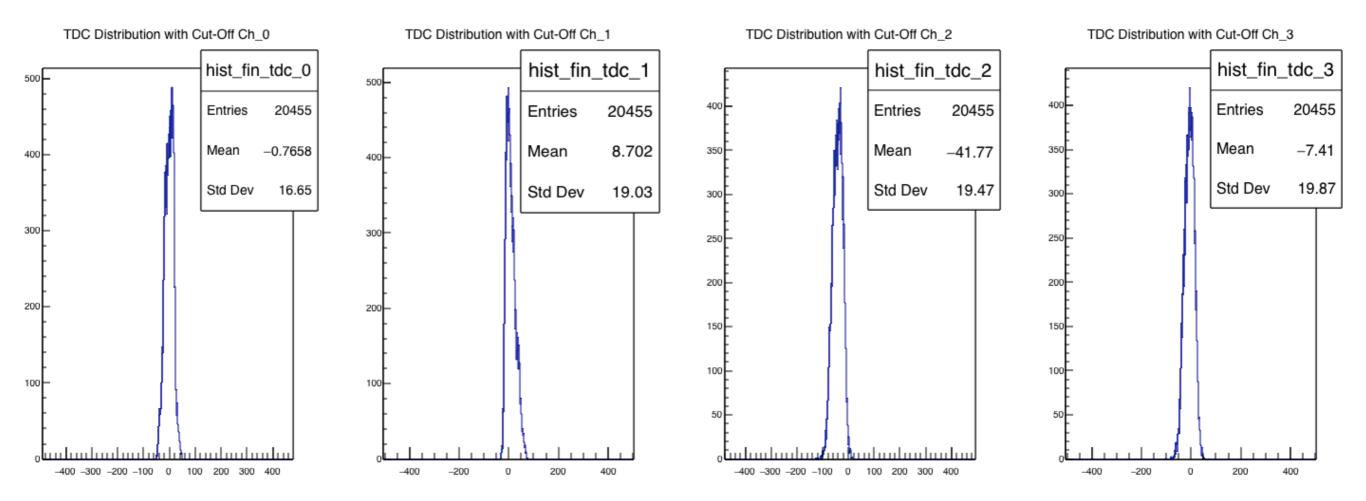


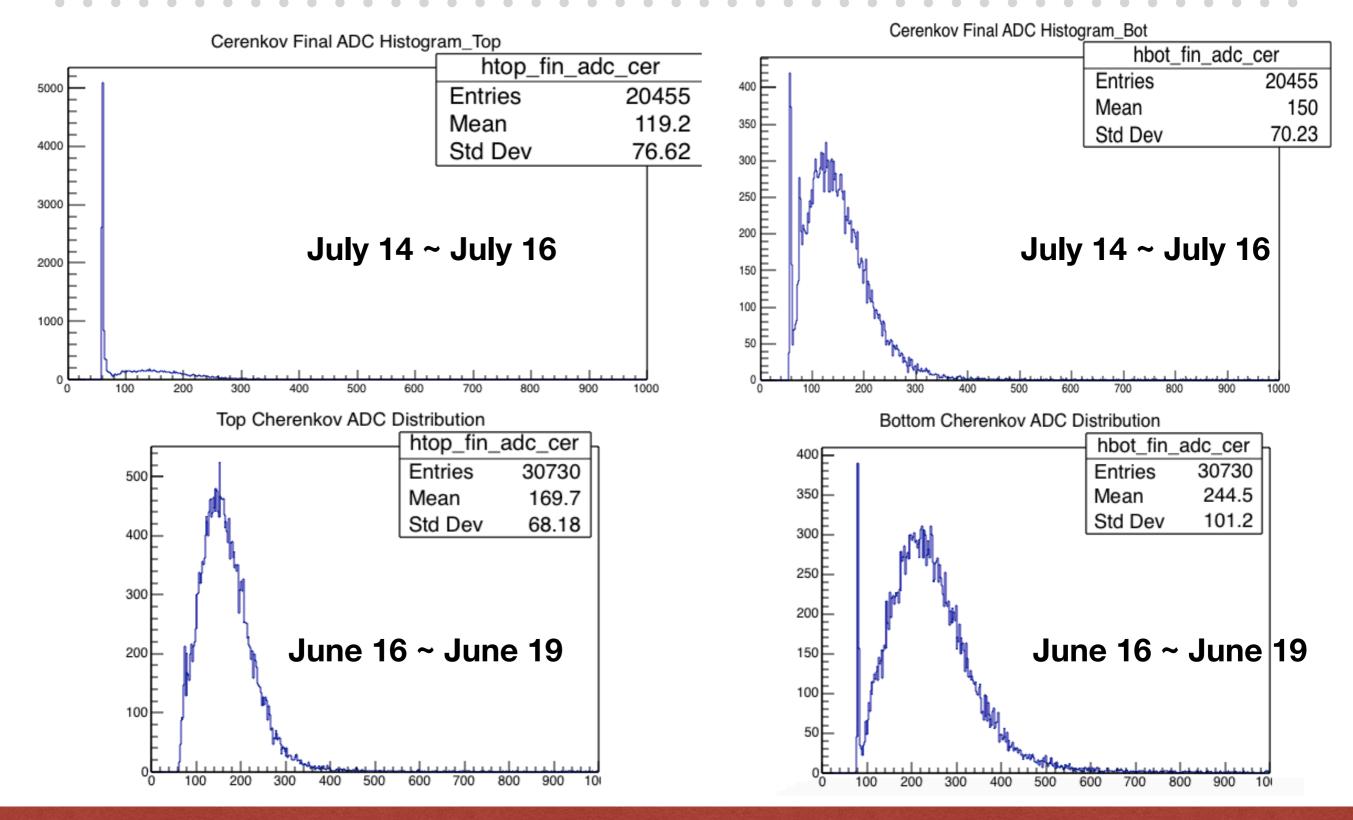
- Raw ADC Distribution of trigger counters are fitted with Landau distribution
- Cuts are given to exclude overflow and low region (using MPV and Sigma)
- TDC, Coincidence Cut also applied

#### • ADC Distribution after applying cuts



- TDC Distribution after applying cuts
- Haven't done slewing correction yet.

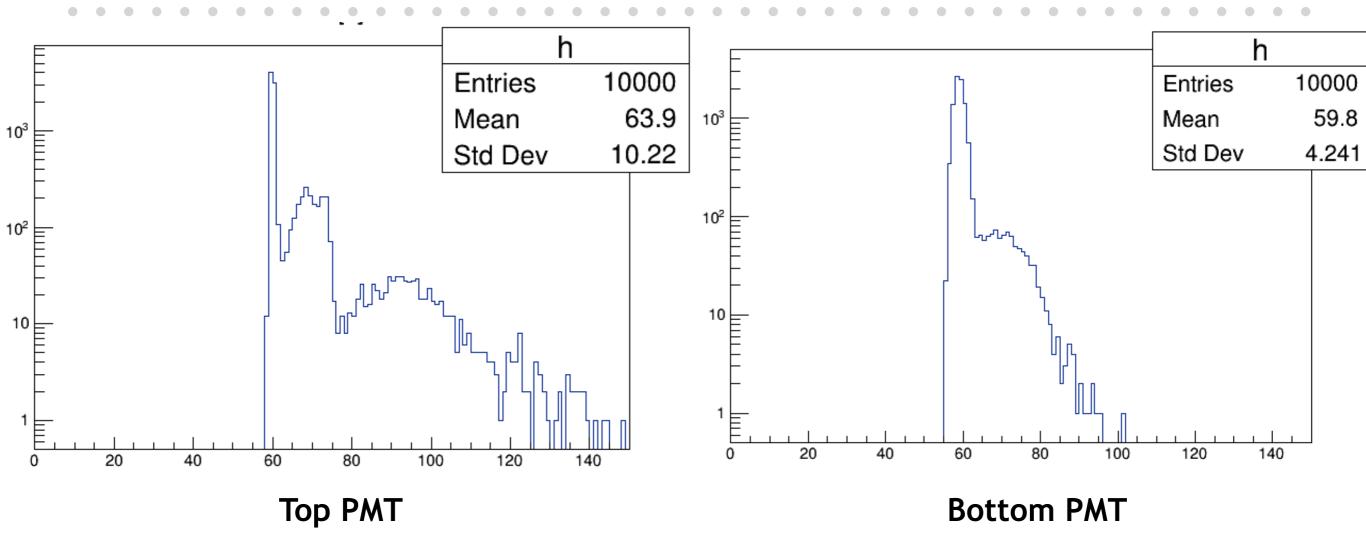




#### Hadron & Nuclear Physics Lab

#### July 25. 2018

# PMT Test with LED



- ADC Distribution in Log scale
- Applied HV : -2300 V for PMT

# Plans for August

- Hit position study based on cosmic ray test data during June ~ July
- How to measure the refractive index of the water? : Until 30th, July
  - Water will be kept for the examination of possible contamination

- From the August
  - Simulation study based on E07 Data
  - Developing 2nd prototype (60 cm): repeating cosmic ray test & pmt test