

Status report

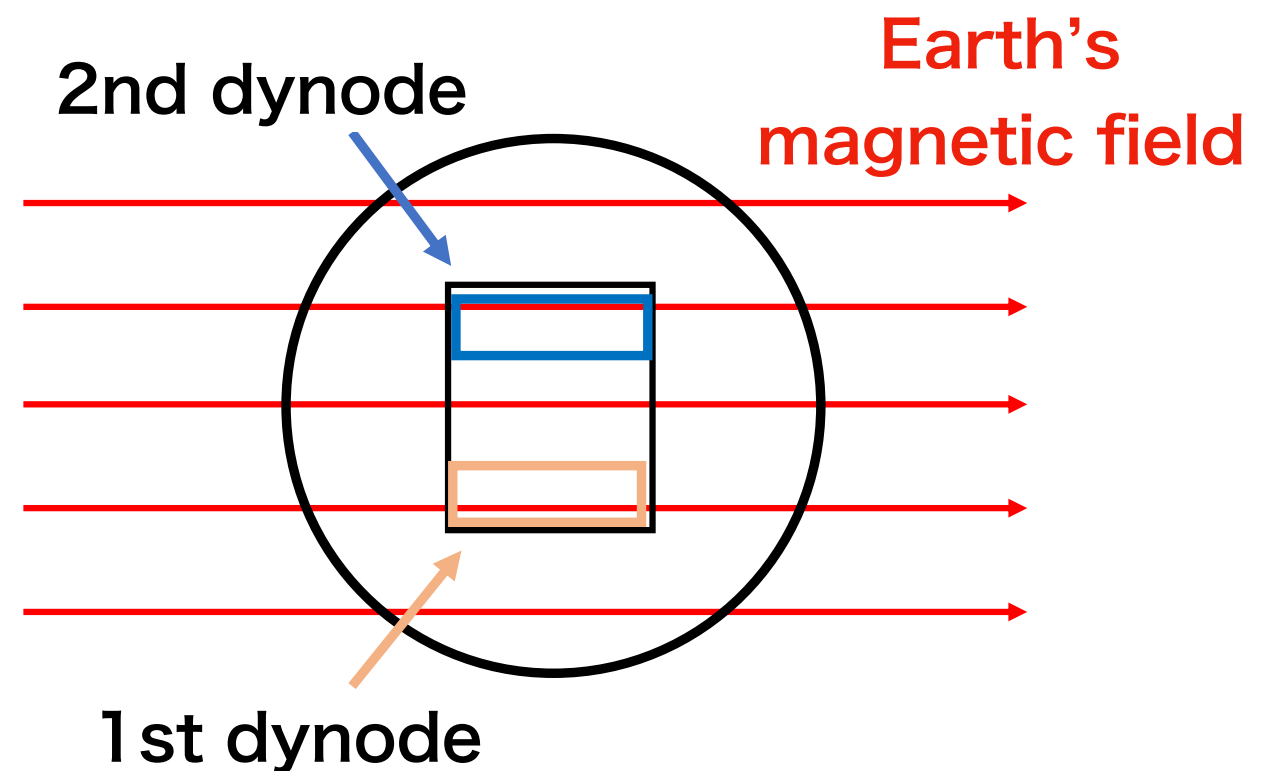
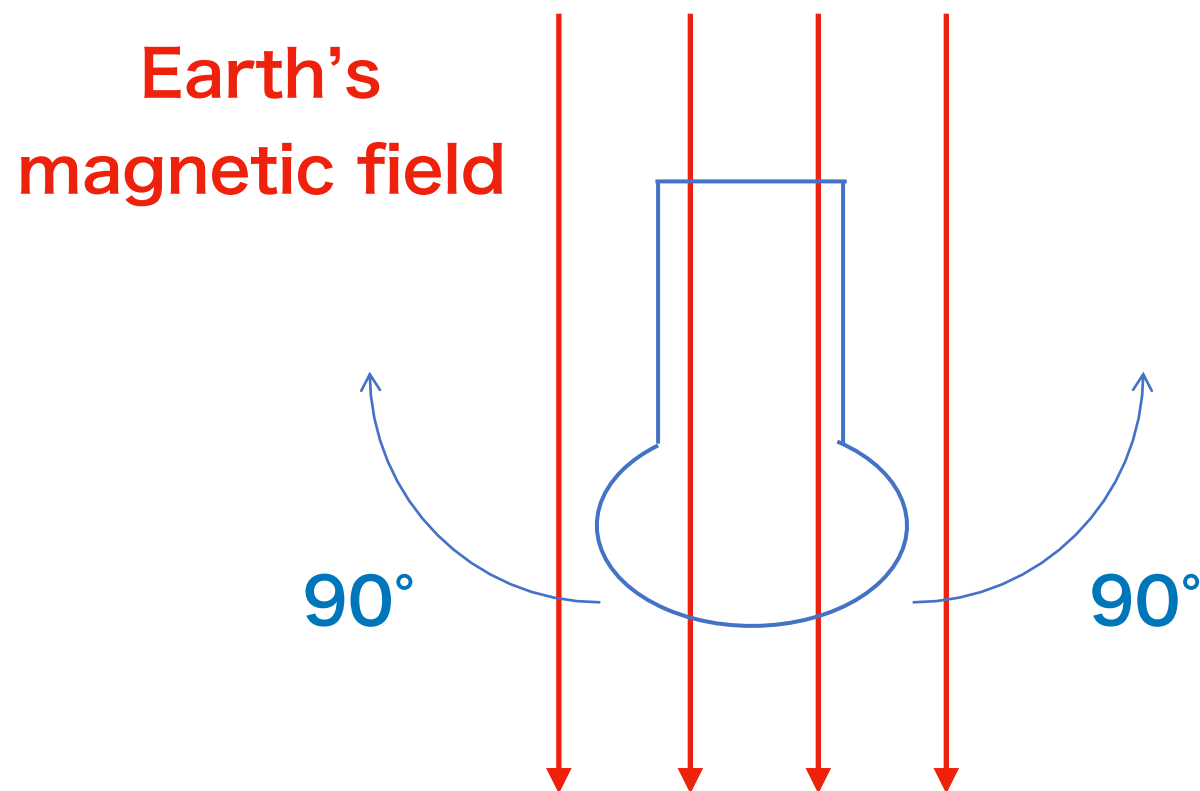
10/10/2019

Tokyo University of Science

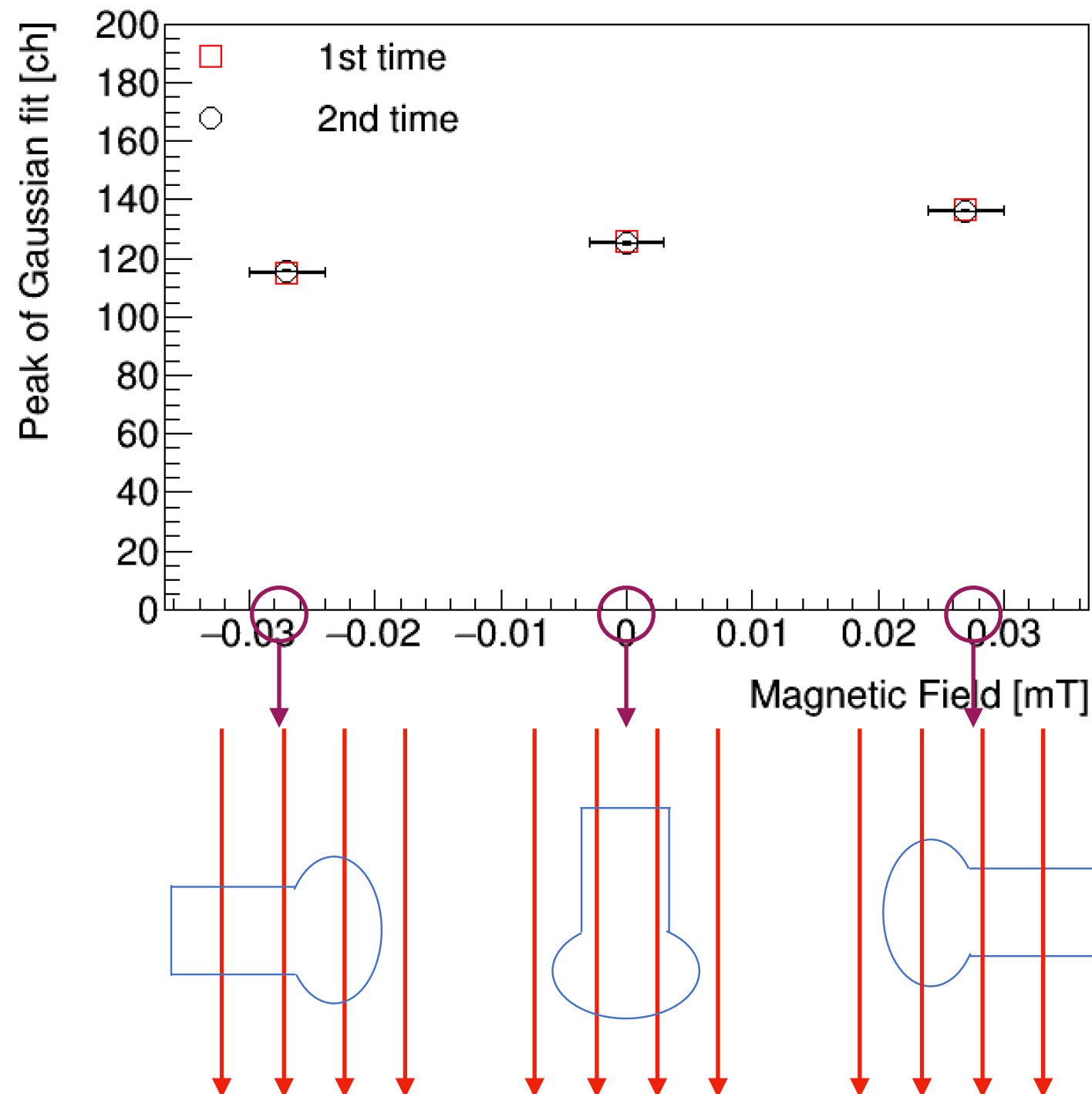
Michitaka Inomoto

Dynode Structure

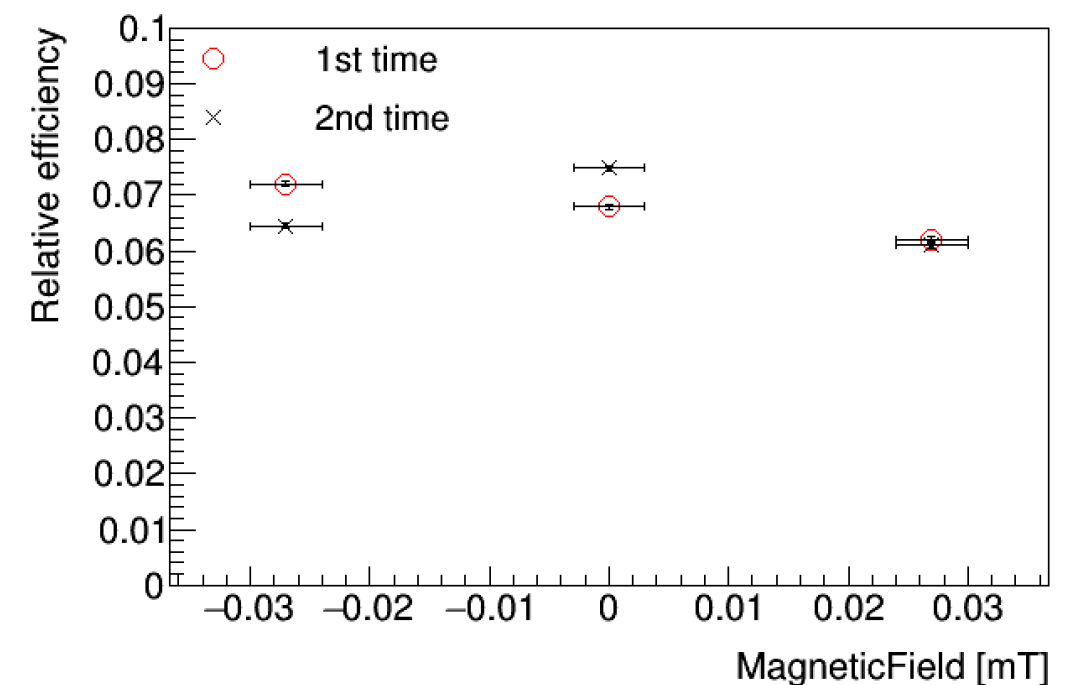
- I set a HA coated PMT so that 1st dynode was at the bottom without the coil.
- I checked the gain of the PMT.
- Earth's magnetic field in the laboratory is about 0.027 ± 0.003 mT.
- I measured the gain in three types of PMT's angles to Earth's magnetic field.
 - The angles : -90° , 0° , 90° .



Dynode Structure

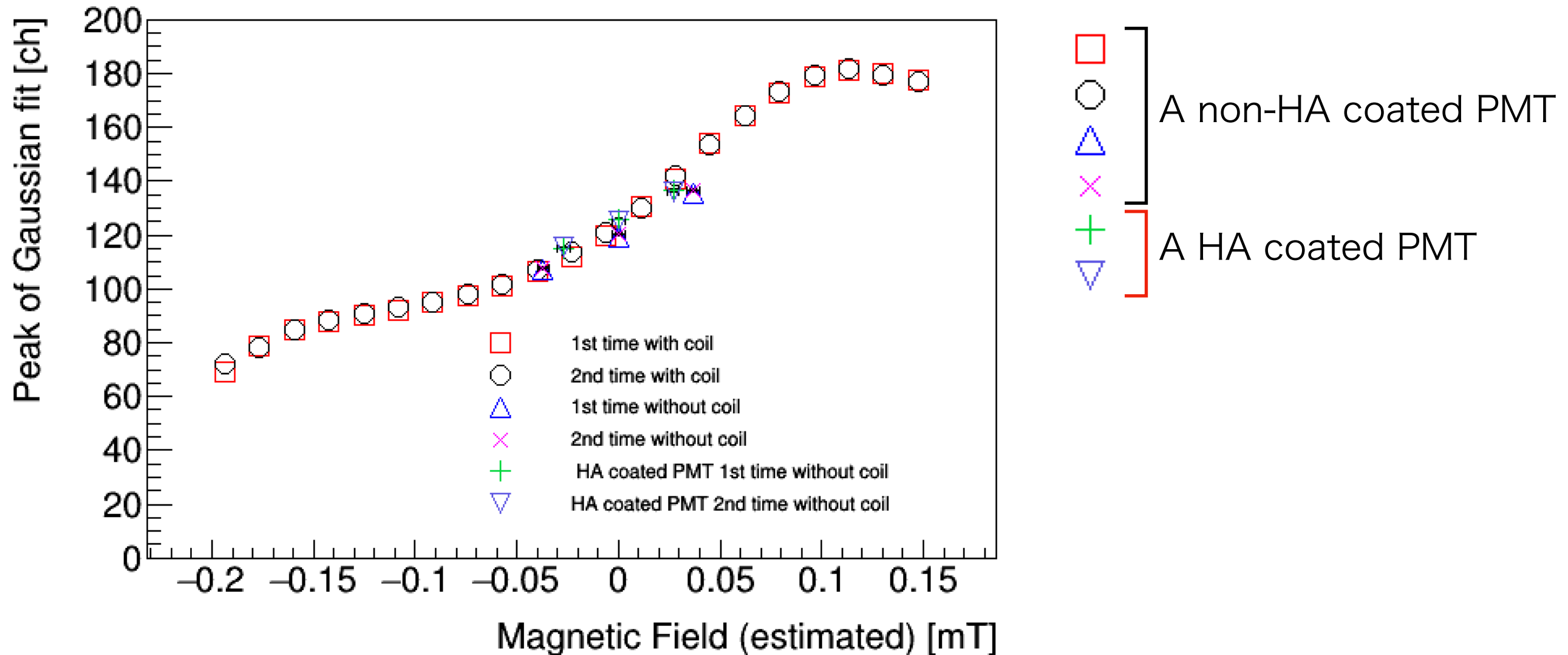


- The result shows that Variation of the gain is about 15 %.



Dynode Structure

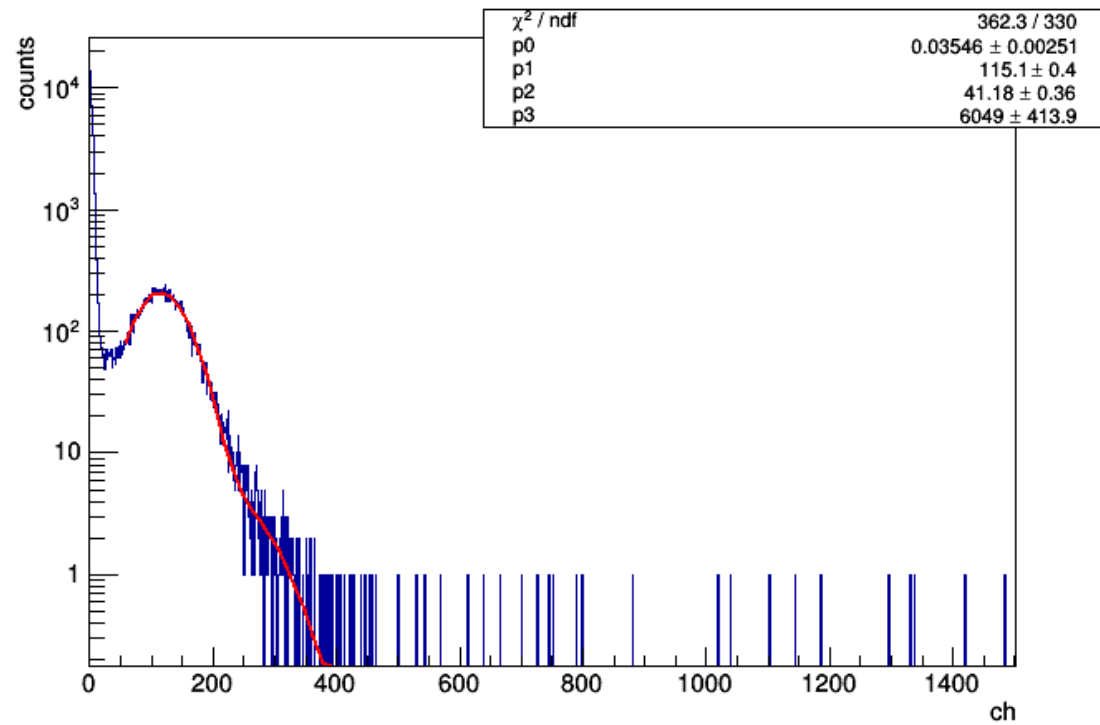
- I compared the gain of a HA coated PMT with the gain of a non-HA coated PMT.



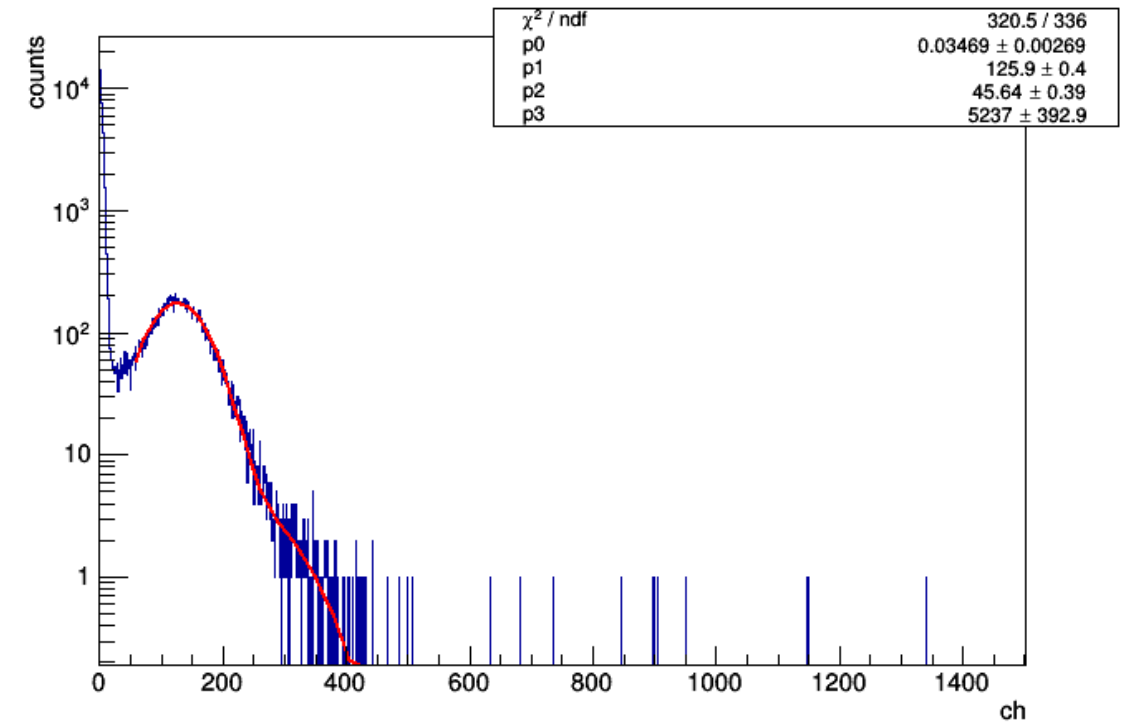
As the magnetic field increases, the gain increases.

Charge Distribution (HA coated PMT)

-0.027 mT



0.000 mT



0.027 mT

