

Status report

August 9, 2019

Tokyo University of Science

Michitaka Inomoto

Dark rate

- We compared dark rate of 3-inch PMTs in TUS.

	Positive HV	Negative HV
HA coated PMT	180 Hz	183 Hz
Non-HA coated PMT 1	295 Hz	232 Hz
Non-HA coated PMT 2	————	<u>1870 Hz</u>

 This dark rate is very high.

Non-HA coated PMT 2 is considered to be out of order.

Future plan

- We will create some magnetic fields with a coil
We will measure B-field in the dark box with a Gauss meter.
- We will measure PMT's efficiency in B-field.
- We will rotate the PMT on its axis.
We will check the angle dependence of the efficiency.

