Lab 2# Cosmic Mbs Rays

· Sctup stage: Objectives. 1) Set 10mV for throshold reasure individual throholds

· mersure each PMTs 2.)· Random 3 true Cos dist of much cant sates 3,) (4) Calibrate the fac Preas produlary and full runge · Count rate collection: t=20 sec · 10-20 deta points

2 PMT (all 4 sides screw rotate threshold 10-20 times

n) counts

in) count rate

Volts threshold

PMT: Bar# / Left.

• Trial # | $\Omega = 227,753$ $\dot{n} = 11,387.65$ $V_{h} = 70.8$

Trial #2 $V_{7h} = 75.4$ n = 20,679n = 1,033.95

• Trial # 3 $V_{7h} = 80.2$ N = 20,030 $\hat{n} = 1001.5$

• Trial # 5 $V_{7h} = 85.8$ n = 19,302 $\hat{n} = 965.1$

· Trial#6 VTh = 90.1 n= 20,092 n= 1604.6 · Trial#7 VTh = 97.5 n=19,486 n=974,3

Trial #8 $V_{Th} = 102.7$ N = 19,790 $\hat{N} = 999.5$

·Trial #9 Vin= 10P./ n= 21,197 n= 1059.85 · Trial#10 V7h = ///.> n= 19854 n=992.7 · Trial # 11 VTh= 152.2 n= 18317 $\dot{n} = 915.85$ · Trial # 12

Vm = 261.7

$$n = 15848$$

$$\hat{n} = 792.4$$

$$Trial # 13$$

$$V_{1h} = 161.9$$

$$\hat{n} = 17,990$$

$$\hat{n} = 899.5$$

 $T_{ria} = 4 + 14$ $K_{h} = 170$ N = 17390 N = 869.5

Tral #15

VTh = 181.5

$$n = 17.621$$
 $n = 881.05$
 $Trial # 16$
 $V_{Th} = 190.1$
 $n = 17399$
 $n = 869.96$
 $Trial # 17$
 $V_{Th} = 40.3$
 $n = 386,887$
 $n = 19344.35$

• Trial # 18
$$V_{Th} = 45.6$$

$$\Omega = 56,657$$

 $T_{r,s} = \frac{1}{\sqrt{2}}$ $V = \frac{1}{\sqrt{2}}$

1 Trial # 20'.

V= 57.2 n= 26479 n= 1323.95

Trial # 21.

V=64.7 n=21873 $\tilde{n}=1691.15$

 $\frac{1}{V^{2}} = \frac{1}{198.45}$ $\frac{1}{198.45}$