

Lab 5

| Setting       | Micrometer (mm) |              |
|---------------|-----------------|--------------|
| Blocked       | 0.0             | no light     |
| 1 Slit (far)  | 4.05            | interference |
| 2 Slit        | 5.00            | interference |
| 1 Slit (near) | 5.85            | interference |
| blocked       | 0.15            | no light     |

$$V_{\text{offset}} = 10.0 \text{ mV}$$

|                 |          |
|-----------------|----------|
| Double Slit max | 0.895 V  |
| 1 Slit - far    | 0.2334 V |
| 1 Slit - near   | 0.2271 V |

Fig 8 • Slit blocker is at  $\approx 3.42 \text{ mm}$   
 $V = 0.235 \text{ V}$

• single slit 0.2480 V

March 18

123 Tuned photomultiplier on, to 6 turns  
 Discriminator level 4

500V  $\leftarrow$  PMT setting

Max at 29799 Hz

$$\langle \sigma t \rangle = \frac{1}{29799} = 33.56 \mu\text{s}$$

$$t_r = 3.3 \text{ ns}$$