



photons emitted  
at  $t_1$  and  $t_2$

photons detected

$$\text{at } t_{d1} = t_1 + \frac{\Delta x_1}{c} \wedge t_{d2} = t_2 + \frac{\Delta x_2}{c}$$

$$\rightarrow \Delta x_1 = (t_{d1} - t_1) \cdot c \wedge \Delta x_2 = (t_{d2} - t_2) \cdot c$$

$$\Delta x = \Delta x_2 - \Delta x_1 = [t_{d2} - t_2 - t_{d1} + t_1] \cdot c$$