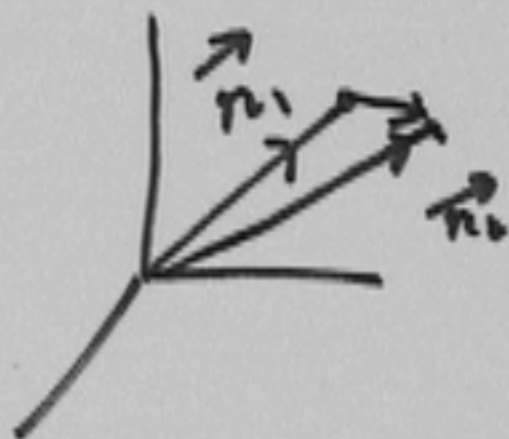




$$\begin{bmatrix} A'_1 \\ A'_2 \\ A'_3 \\ A'_4 \end{bmatrix} = \begin{bmatrix} \\ \\ \\ \end{bmatrix} \begin{bmatrix} A_1 \\ A_2 \\ A_3 \\ A_4 \end{bmatrix}$$

$$\Delta S \cdot \Delta S$$

$$- (\Delta s)^2 - ((\Delta x)^2 + (\Delta y)^2 + (\Delta z)^2) + c^2 \Delta t^2$$

$$(\Delta\tau)^2 = (\Delta t)^2 - \frac{(\Delta x)^2 + (\Delta y)^2 + (\Delta z)^2}{c^2}$$



$$\Delta t' = \gamma \left(\Delta t - \frac{v \Delta x}{c^2} \right)$$