

$$\begin{pmatrix} \gamma & \gamma\beta \\ \gamma\beta & \gamma \end{pmatrix} \begin{pmatrix} t' \\ x' \end{pmatrix} = \begin{pmatrix} t \\ x \end{pmatrix}$$

t' AXIS:

$$\begin{pmatrix} \gamma t' \\ \gamma\beta x' \end{pmatrix}$$

x' AXIS

$$\begin{pmatrix} \gamma\beta t' \\ \gamma x' \end{pmatrix}$$

