

$$\alpha = i\beta$$

$$x' = \cos \alpha x + \sin \alpha (ict)$$

$$(ict') = \cos \alpha (ict) - \sin \alpha x$$

$$x' = \cos i\beta \cdot x + \sin i\beta \cdot ict$$

$$ict' = \cos i\beta \cdot ict - \sin i\beta \cdot x$$

$$\cos i\beta = \frac{e^{i \cdot i\beta} + e^{-i \cdot i\beta}}{2}$$

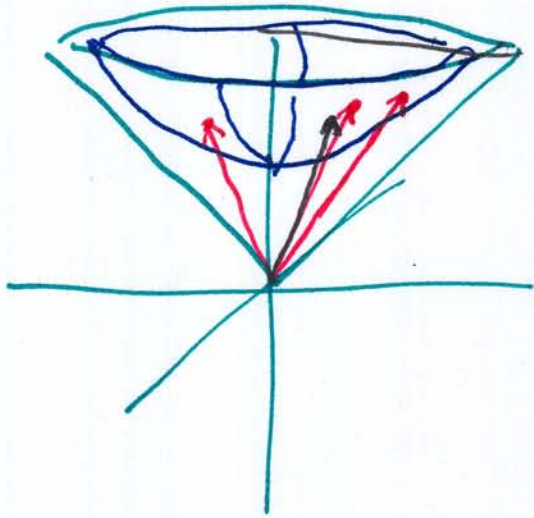
$$= \frac{e^{-\beta} + e^{\beta}}{2} = \cosh \beta$$

$$\sin i\beta = \frac{e^{-\beta} - e^{\beta}}{2i} = i \sinh \beta$$

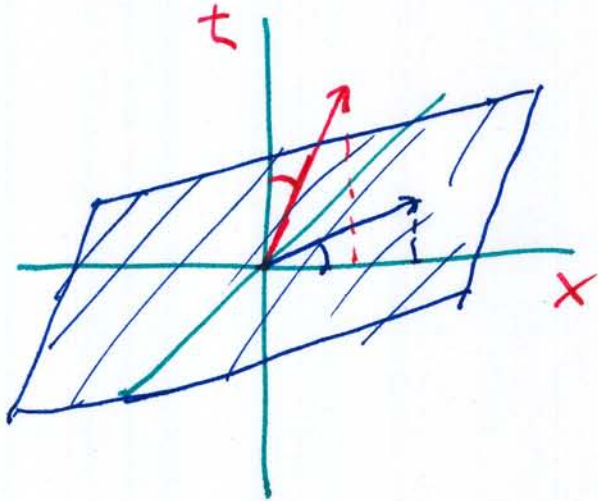
$$x' = \cosh \beta \cdot x - \sinh \beta \cdot ct$$

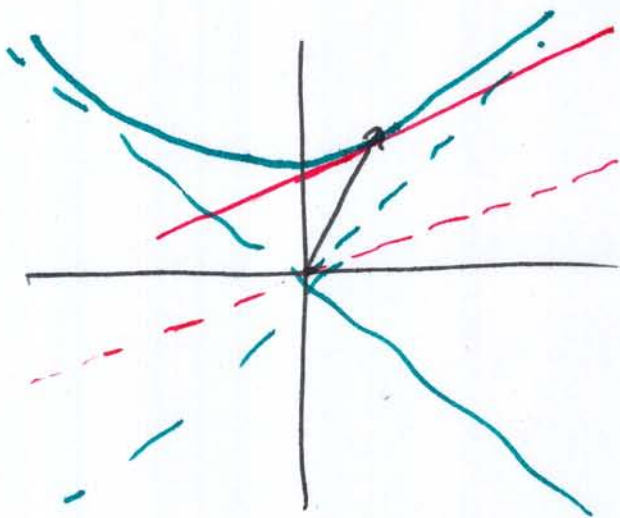
$$ct' = \cosh \beta \cdot ct - \sinh \beta \cdot x$$

$$-c^2 t^2 + x^2 + y^2 = -a^2$$



$$-2c^2 t \delta t + 2x \delta x + 2y \delta y = 0$$





$$V^b = w_a T^{ab} = w_m T^{mb}$$

$$V^m = w_a T^{am}$$

$$T_{ab} \textcircled{c} T_{m\textcircled{c}}^d$$

$$\frac{\partial Y}{\partial x} = \delta Y_x$$

$$\frac{\partial vY}{\partial x} \neq \delta Y_x$$

$$vY = vY(x, y, z)$$