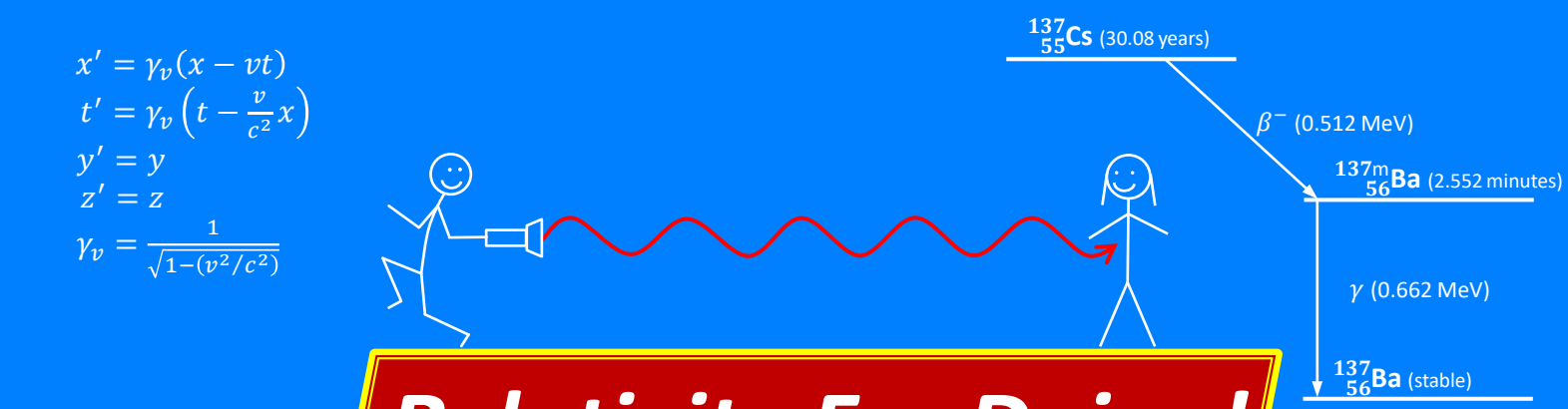
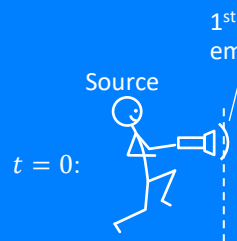
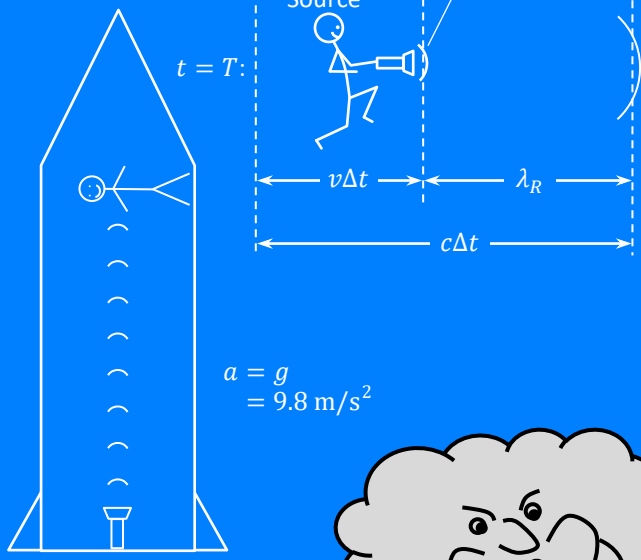
$$x' = \gamma_v(x - vt)$$
$$t' = \gamma_v\left(t - \frac{v}{c^2}x\right)$$
$$y' = y$$
$$z' = z$$
$$\gamma_v = \frac{1}{\sqrt{1-(v^2/c^2)}}$$

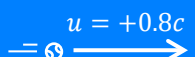


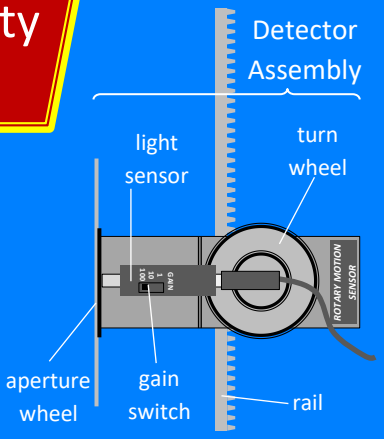
Relativity For Doing!

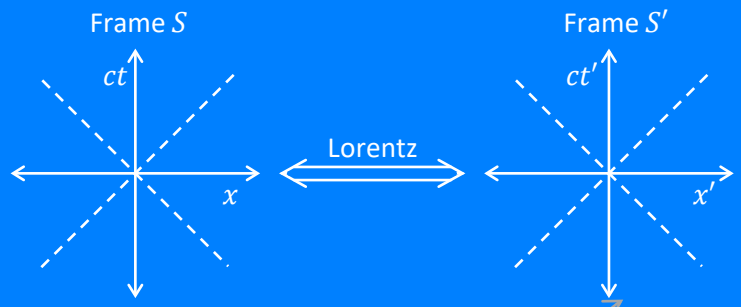
Activities for Space, Time, and Relativity
Spring 2024

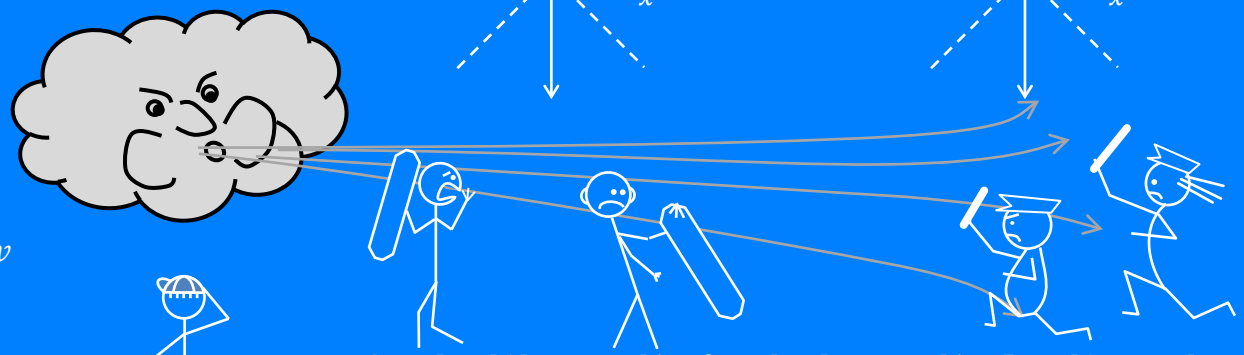


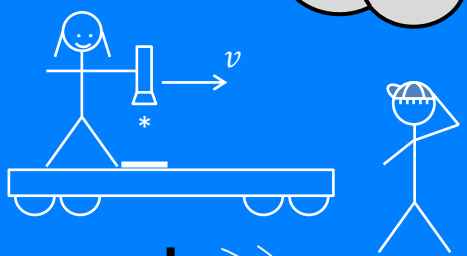













```
ListPlot[{lorentz[1, 2, v], lorentz[1, 5, v]}, ...]
ListPlot[{galilean[1, 2, v], galilean[1, 5, v]}, ...]
```