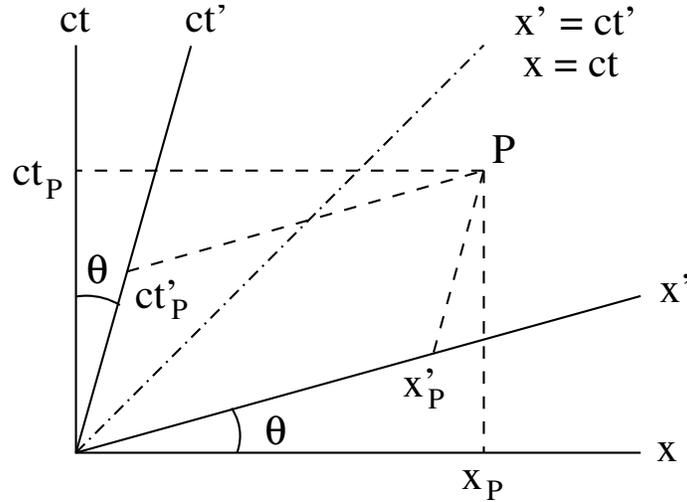


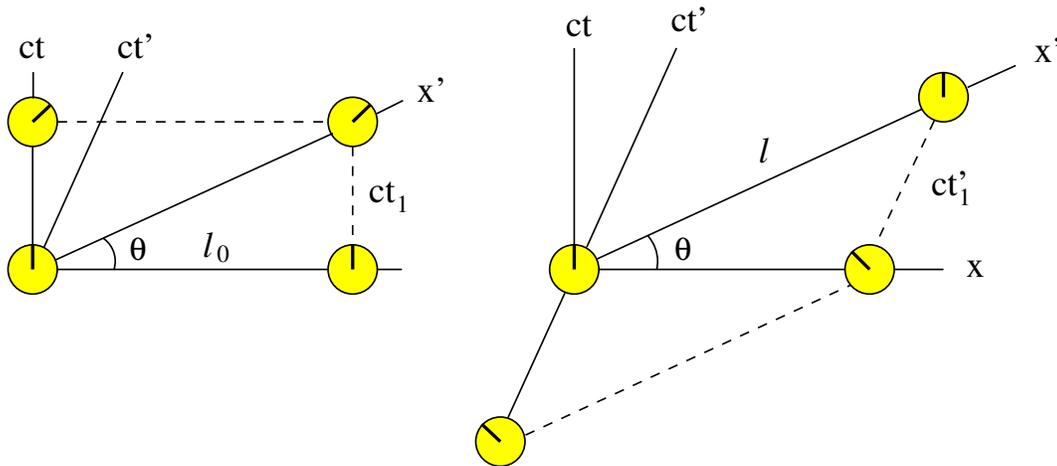
Minkowski Diagram I [mln54]

Consider two inertial systems moving with relative velocity v in x -direction. Clocks are synchronized at $t = t' = 0$ and $x = x' = 0$.



The axes of the moving frame are tilted by $\theta = \arctan(v/c)$. The (dot-dashed) world line of light is the same in both frames.

Relativity of simultaneity:



Left: synchronized clocks at $t = 0$ and $t = t_1 = \ell_0 v / c^2$.

Right: synchronized clocks at $t' = 0$ and $t' = t'_1 = -\ell v / c^2$.

Note: the moving clock that is spatially ahead lags in time.