Time Dialation → A clock in a moving frame of refrence (S') measures a longer time interval (i.e needless move slowely) between two events while for the same event the clock in stationary frame measures short time interval. This is known as time dialation. According to time dialation

$$t = \frac{t_0}{\sqrt{1 - v^2/c^2}}$$

Here t_0 is called proper time and t is time dialation.

$$t > t_0$$