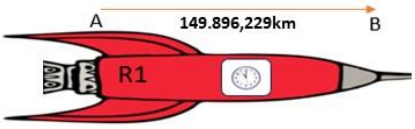
Fist we have rocket R1 and rocket R2 and a "stationary clock not moving compared to each other:

Regarding Einsteins special relativity theory

Light from A to B



Einstens 1. postulate in §2; Time is: AB/c

0,5 second

2 STATIONARY ROCKETS NOT MOVING

Light from B to A

Einstens 1. postulate in §2; Time is: AB/c

0,5 second

SETUP:
2 rockets R1 og R2 and stationary clock are stationary compared To ecah other.

Distance between A and B are thereby also measured the aame in R1, R2 and stationary observer / stationary clock.

STATIONARY CLOCK

0,5 second

Einsteins 1. postulate:
According to Einsteins 1. postulate in §2, then all physical tests shall remain the same in all inertial frames.
This means that time in R1 and R2 shall remain 0,5s Regardless of each rockets velocity compared to the Stationary clock.

This will be shown on the next page.

While light moves from A to B in R1 will the R1 clock And stationary clock both tick 0,5s. The will the R2 Clock and stationary clock while the light in R2 moves From B to A.

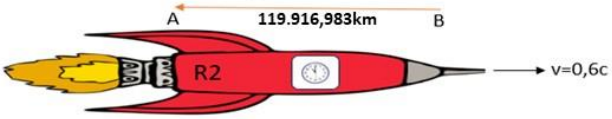
Now we accelerate R1 and R2 up to a steady speed of 0,6c:

R1 and R2 accelerated to 0,6c

Light from A to B

Einstens 1. postulate in §2; Moving time is: AB/c

Light from B to A



Einstens 1. postulate in §2; Moving time is: AB/c

0,5 second

Moving time in R1 is slower with a factor 2. This is not the Lorentz factor of 1.25!

Calculation according to §1, §2 and §3:

Description	Value	
c=	299.792,4580	km/s
Stationary distance of AB	149.896,2290	km
v=0,6c	179.875,4748	km/s
Length. Contrac. Factor	0,80	(1-(v/c)^2)^0,5
Lorentz factor	1,25	1/(1-(v/c)^2)^0,5
Length contracted distance of AB	119.916,9832	149.896,2290*0,8
AB/c =	0,50	Sec
rAB / c-v	1,00	sec (§2 formula 1)
rAB / c+v	0,25	sec (§2 formula 2)

0,5 second

Moving time in R2 observed stationary is faster (twice as fast) than stationary time! Do not correspond to the Lorentz factor either.

While stationary clock ticks 1 second, then R1 clock stationary observed, tick twice as slowly and only tick 0,5 second.

Conclusion:
R1 clock and R2 clock, ticks with different speed.
Even though R1 and R2 moves with same speed!

While stationary clock ticks 0,25 second, then R2 clock observed stationary tick twice as fast with 0,5 second.

Einsteins formulas in §2 for stationary time:
where rAB is the lengthcontracted distance between A and B
Measured stationary as: **119.916,983Km**
(149.896,229/1,25 = 119.916,983km)

1 second

$$\frac{r_{AB}}{c-v}$$

Stationary clock

0,25 second

$$\frac{r_{AB}}{c+v}$$

NOTE:
The 2 clocks in R1 and R2, and stationary clock can show different starting times. Starting time / synchronization does not influence on the theory. Only ticking time for each event matters.
Then it is also independent if it happens simultaneous in R1 and R2. Only thing that matters is how many tick each clock must tick according to the theory trying to use Einsteins 1. postulate of moving time!.

Danny Stjerne, Denmark 2024