

The Lorentz Scalar

1. $t' / t = [1 - (v^2/c^2)] / [1 - (v^2/c^2)]^{1/2}$
2. $t' / t = [1 - (v^2/c^2)]^{1/2}$
3. $t / t' = [1 - (v^2/c^2)]^{-1/2}$ ---- This is the Lorentz Scalar
4. We see that Expression (2) x Expression (3) yields the identity: Proof Thus:-
5. We set $v > c$ and put this into the Expressions 1 to 3, thus:-

$$\begin{aligned} \text{Gives:- (3) Lorentz} &= 1/i \\ &= -i \\ \text{(2) Lorentz} &= i \end{aligned}$$

So that (3) x (2) = $-i \times i = 1$ (Identity):

Proof, since $[t'/t] \times [t/t'] = 1$ (Identity)

We then see that only with these Imaginary sets can we pick up (with the single product operation) on both sides of Zero (thus that is to say in both of the positive and negative sectors) to yield and give back the POSITIVE REALS.