

## Re: Lorentz transformations – a derivation

**Source:** <http://sci.tech-archive.net/Archive/sci.physics.relativity/2005-01/1788.html>

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**From:** jem (*xxx\_at\_xxx.xxx*)

**Date:** 01/09/05

Date: Sun, 09 Jan 2005 09:26:58 -0500

Bilge wrote:

> *jem:*

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> > >

> > > *>Remember this proposed definition? An inertial reference frame is a*

> > > *>reference frame in which all stationary standard clocks tick at the same*

> > > *>rate.*

> > >

> > > *Yes, I remember it. It's still circular and doesn't explain what*

> > > *`ticks at the same rate' means.*

> >

> > *"Ticks at the same rate" means the number of ticks recorded on each*

> > *clock is equal over every time interval. The comparison between any 2*

> > *clocks is accomplished by sending signals from one to the other and*

> > *comparing the rate of the received signal with the tick rate of the*

> > *clock at the reception point. This comparison can be done without*

> > *synchronizing the clocks (although synchronizing them at the onset would*

> > *make an actual comparison easier).*

> >

> > *Where do you see circularity?*

>

> *See the posts from the last time you made that suggestion.*

>

Perhaps it's you who should see the old posts. No circularity was demonstrated there.