Re: answer to YBM's bell problem

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- *From*: rbwinn <rbwinn3@xxxxxxxx>
- *Date*: Wed, 10 Sep 2008 22:57:35 −0700 (PDT)

On Sep 10, 7:19ýpm, YBM <ybm...@xxxxxxxx> wrote:

> rbwinn a ýcrit :
>
> one question at a time, let's simplify the point since you're clearly lost from the very beginning :
>
> n'=t(1−v/w)
>
> Well. In frame A, I consider two light rays on the (Ox) line (does it remind you something ?). One at speed w=c in A, the other one at speed w=−c in A. How would an observer in B would compute, in the context of you "theory", using n', the speeds of both light rays simultaneously ?

OK, say that the lights are emitted at −a and a in both frames of reference when the origin of B is at the origin of A, each ray of light directed at the origins. B is moving in the +x direction relative to A at a velocity of v. The light ray emitted at −a has a velocity of w=c in both frames of reference. The light ray emitted at a has a velocity of w=−c in both frames of reference. The light ray emitted at −a goes from x=−a to the origin of A in frame of reference A in a time of t=a/c. The light ray emitted at −a goes from x'=−a to the origin of B in a time of n'=a/c. The light ray emitted at a travels from x=a to the origin of A in a time of t=a/c. The light ray emitted at a travels from x=a to the origin of B in a time of n'=a/c. The equation for n' is

n'=t(1−v/w)

You remember the equation for n', YBM.

> Is there some kind of magic making its clock change whenever he consider one light rays or the other one ?

It is not a transformation equation, YBM. It just tells how far light has gone in B according to a clock that shows n'.
Robert B. Winn
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