

Ralph Malcolm Rabbidge on 'bent light'

A conversation between Paul B. Andersen and Ralph Malcolm Rabbidge had in April 2012. You can run all the simulations either as Applets or Applications, see how [here](#).

Paul B. Andersen wrote:

[VerticalBeam Applet](#) [VerticalBeam Application](#)

You have stated over and over (what nobody has ever disputed) that "the vertical beam remain vertical in all moving frames".

So what is this "beam" that remains vertical?

It is the line through the instant positions of the consecutive elements of the beam.

The beam is what you see if you take a photo.

(you can take a photo of a light beam in fog.)

It doesn't matter if the elements are photons, water molecules or bullets.

Ralph Malcolm Rabbidge responded:

Correct.

Paul B. Andersen wrote:

[MovingTarget Applet](#) [MovingTarget Application](#)
[MovingSource Applet](#) [MovingSource Application](#)
[RotatingSource Applet](#) [RotatingSource Application](#)

The beam is curved.

If you take a photo, the curved line is what you would see.

Ralph Malcolm Rabbidge responded:

It is not a 'beam'.

It is merely a plot of the positions of objects at a particular instant.

Paul B. Andersen wrote:

So it is thoroughly documented that Henry Wilson claims:

1. In the case when the angular velocity of the source is zero, then the straight line we see on the photo is a beam.
2. In the case when the angular velocity of the source is non zero, then the curved line we see on the photo is NOT a beam.

So the question is still:

Is there a lower limit for the angular velocity of the source below which the line is a beam?

What is this limit?

Ralph Malcolm Rabbidge responded:

zero.

Paul B. Andersen wrote:

If I place a laser on my table, pointing east-west, and blow smoke in front of the laser, is then the line I see a laser beam, or is it not?

(The angular velocity of the source is $7.27E-5$ rad/s)

Ralph Malcolm Rabbidge responded:

Strictly speaking, NO