

# 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