

100 years of Einstein's SRT
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100 years have passed from the date of creation of SRT. Millions of articles, reviews and books have been written and the United Nations has decided to establish 2005 as the centennial year of SRT. Considering all that is clear in this theory, one must still continue to be surprised by its unusual aspects

Lets review it again:

1. SRT is based on two postulates:

- a. According to classical mechanics, physical processes, which occur in rest or in a rectilinearly driven reference system are described under the same laws.
- b. The rectilinear - uniform propagation of a quantum of light ($C=1$) *in vacuo* has a constant magnitude and does not depend on the source of radiation.

These two postulates would be proven if in the final analysis, they corresponded with Galilean transformations. However, the result appears negative. Galilean transformations do not unite these two theories. Why?

2. The rectilinear - uniform motion of a quantum of light ($C=1$) is connected with Maxwell's classical electrodynamics. SRT has grown from Maxwell's electrodynamics and main component in it is the *electron*. What describes the *electron* in Maxwell's electrodynamics? It is natural, that this *electron* should be in motion, but it does not move rectilinearly. It rotates around its own diameter (spin of Goudsmit-Uhlenbeck) and such a rotation creates electrical waves. In such rotation all geometrical and physical parameters of the *electron* are changed. It is for this reason Einstein utilized the Lorentz transformations. And all that is sensible in SRT is that it examines two completely different types of movement: rectilinear (quantum of light $C=1$) and rotational (Maxwell's *electron*). It examines the transformation of the **electron** into a quantum of light (photon) or quantum of light into an *electron* .

3. According to classical electrodynamics, an electron in rectilinear motion does not create electrical waves. Why? Because the *electron* travels as a quantum of light ($C=1$). In such movement its geometrical form is a circle. In such movement its area of contact with the vacuum is minimal and it is not capable of changing the uniformity of the vacuum.

4. When the *electron* rotates around its own diameter, its speed is more than the rectilinear motion of a quantum of light. Its speed is $c > 1$. For this reason physicists ascribe a huge frequency to the electron which is the reason its energy ($E = h\nu$) is higher.

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