# Calculations on the speed of light 


#### Abstract

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In my articles of 1992-1996 it was demonstrated that size of elements of matter (particles, DNA molecule...) are whole numbers since it is related with their wave nature. The size (curvature) is wave number. The wave number is number of waves in resonator, it is measured in reversed meters, the same like "curvature" - the value of reversed radius. It is resonance condition of existence of elements of matter.


Applications of this method will be demonstrated later for the cases of calculations on parameters of resonance transmutation of matter. In this article it is proposed to consider the light of speed as whole number. This proposal based on understanding of nature of propagation of electromagnetic wave in space-time. The speed is the distance in space dimension traveled during a unit of time by a wave.

We use meter as unit of spatial measurements. It was introduced by France Academy of Science, to use part of size of our planet to be unit of measure named as "meter". So, it is not mathematical abstract but it is natural unit corresponding to some natural process, to resonance effects.

On unit of time, named as "second", we know it is part of natural period of time that is 24 hours rotation cycle of the planet. It is 24 hours, $1440 \mathrm{~min}, 86400 \mathrm{sec}$.

Assuming the space-time is discrete (quantum) nature structure we can conclude that
the speed of light also must be a whole number. Let's prove it by calculations.
Proton wave length is

$$
\mathrm{L}=\mathrm{h} / \mathrm{mc} \quad \mathrm{~F} .1
$$

we can find $L=132141000$ (with good accuracy). Note: it is

$$
L=3 \times 44047=132141 \quad \text { F. } 2
$$

This mathematical fact let us to assume inner structure of proton made of 3 parts, i.e. of 3 subelements.

Next, we can calculate the speed of light

$$
\mathrm{c}=\mathrm{h} / \mathrm{mL} \quad \mathrm{~F} .3 .
$$

We can consider that other parameters also are whole numbers, i.e. the Plank constant $\mathrm{h}=$ $6,6260755 \cdot 10^{-34}(\mathrm{~J} \cdot \mathrm{c})$, and mass of proton $\mathrm{m}=1,6726231 \cdot 10^{-27}(\mathrm{~kg})$.

The result is $\mathrm{C}=299792456413177104388$ units of space per unit of time. This number consist of 21 digits. We can divide it to 4 and we'll get number 74948114103294276097 , where the unit of space is 4 meters. It can be natural unit, since 1 meter is $10^{-7}$ of distance between equator and pole of the planet sphere. So, 4 meter is $10^{-7}$ of whole cycle, i.e. part of the wavelength of the planet resonator.

Application of this discovery is useful for aerospace sciences and for better understanding of the nature of the Universe. Alexander V. Frolov a2509@yahoo.com a2509@list.ru

