

Communication dimensions of matter, energy and information

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Abstract: The article provides some thoughts about the physical meaning of information. On the basis of human empirical knowledge, a frivolous equation of the dimensional connection of matter to energy and information is proposed. From the equation it follows that in a closed system information has the dimension of the square of the impulse. In an open, evolving system, information has the dimension of the square of force. Within the framework of this interpretation, knowledge is power, ready for action. In addition, it becomes possible to more clearly distinguish information from the message. The message, in contrast to information, obeys the Landauer principle, according to which any generator, transmitter, and receiver of a message is a heat source within the framework of a black body model.

Stimulated by the article of Mikhail Idelchik - "Method of a dead cat."

http://samlib.ru/i/idelxchik_m/cat.shtml

We introduce the notation:

sub - substance, kg; ene - energy, J; inf - information, J*kg.

Then the criterion of the similarity of our World looks like :)

$$(\text{sub} * \text{ene}) / (\text{inf}) = 1$$

In the language of Hermes Trismegistus - ... as above, so below ... "

For example, in terms Christianity criterion looks :)

$$(\text{Son} * \text{Spirit}) / (\text{God}) = 1$$

It follows - the denominator can never be zero.

Norbert Wiener gave an amazing definition of information - ... Information is information, not matter or energy. He, as a mathematician, avoids dimensional physical quantities. While a physicist, just looking at the dimension of information given above, will say - .. so is the square of the impulse :)

$$\text{J} * \text{kg} = (\text{kg} * \text{m} / \text{s})^2$$

And he will add - ... this is plausible and does not contradict Wiener, at least, because for a closed system the law of conservation of momentum and, consequently, information is satisfied. New information can only appear in an open developing system. It seems that our World - just such a system - it pleases. In an open system, the impulse is not conserved and the square of the impulse changes with time, and therefore, the information becomes a force in the square :)

$$[(\text{kg} * \text{m} / \text{s}) / \text{s}]^2 = \text{N}^2$$

I like working with dimensions and measurements - they break up, structure and make the World available to us in an interesting, colorful way. The numerical value of any physical quantity is always a dimensionless complex of dimensional quantities.

Word, information - impulse, kick, the reason for the creation of our World, according to the sacred texts. :)

It seems that the information is different. In particular, conscious information is the knowledge of life, which for some reason is always lacking, and which is power.

The same idea in verse format :)

Knowledge is power -

Accelerates life run.

Faster and faster -

Shorter age of man.

Where are you, Grail?

Sent to God mail -

Do you know the rule of L'Hopital?