THE PROBLEM OF TIME IN SCIENCE AND RELIGION

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Are there tools for exploring time in a similar way to how it is in space?

There are a huge number of methods to investigate objects in space, according to the senses (and not only). There are mechanical, thermal, optical, acoustic, electrical, magnetic, particle beam-based, chemical, etc. However, for all the variety of the study of bodies of space, there is nothing for the study of time, except a few methods of measuring the duration of intervals. There is not even a question of the existence of objects in time. Furthermore, no one has set out to study such objects, if they exist there.

In this sense, people removed from scientific methods and scientific approach have proven to be more enlightened in the matter of time study. Biblical prophets and Apostles. The first had the ability to foresee the future, the second preached Doctrine, particularly about faith. According to the Apostle Paul, faith is the art of seeing the invisible. According to the scientific approach, the invisible is that which is not registered by optical methods. Consequently, these are not objects of space, which always have the possibility of interaction with electromagnetic radiation of some frequencies. And not fields of different nature, registered by test bodies or detected as quanta of electromagnetic radiation. Following Occam, it is not necessary to introduce any hidden spaces, parallel (or otherworldly) worlds for the invisible. There is an obvious place for the invisible, excuse this pun.

This is time. Moreover, in addition to the absolute time t, known since antiquity, there is also the "local" time discovered by G. A. Lorentz. An

invariant quantity unchanged at arbitrary inhomogeneous Lorentz transformations [1]:

$$(c\Delta\tau)^2 = (c\Delta t)^2 - (\Delta x)^2 - (\Delta y)^2 - (\Delta z)^2$$

is the time interval measured by the particle's own clock (if there were one). Local time relates the displacements of particles in Euclidean space (x, y, z) with absolute time corresponding to these displacements. The difference in the intervals of these times has been repeatedly confirmed experimentally. Taking into account thermal motion, they coincide only in isolated atoms at zero on the absolute Kelvin temperature scale.

At the time, this led to the emergence of A. Einstein's special theory of relativity and G. Minkowski's concept of unified space-time. Further development of these ideas was embodied in the study of a new unified "local space-time". Non-trivial solutions were found, at which the local time coordinate became cyclic. In the work [2] it was shown that the gravitational interaction is a necessary attribute of bodies considered in this "local space-time". However, under one assumption. Local time must be a complex (or two-dimensional) quantity. Further, in the paper [3] this idea was used to establish the difference in the nature of virtual and real particles. Local time for virtual particles is one-dimensional, as well as classical absolute time. In contrast, for existence of real particles their local time must be complex (or two-dimensional). Moreover, the complexity (two-dimensionality) of local time gives real particles the effect of an observable invariant mass. This is a confirmation of G. R. Hertz's concept of the kinetic origin of potential energy [4]. Periodic movements along the hidden cyclic coordinate of local time are realized in the form of potential fields of various natures.

If it is so, then for real particles the well-known thesis about the "arrow" of local time is removed. It is difficult to say what peculiarities it gives to real particles. However, we can assume that bodies consisting of

such particles have a more complex interaction with time. What kind is the subject of future research. It is encouraging that the study of time is emerging in the scientific community at a highly qualified level. In particular, at the 25th International Baldin Seminar on High Energy Physics, "Relativistic Nuclear Physics and Quantum Chromodynamics," held in Dubna in 2023, it was reported that "...two distinct times exist in nature. We associate the existence of nuclei with the existence of dual time" [5].

Returning to the question of how to see the invisible, we can answer it this way. To feel your local time. Due to two-dimensionality, it is possible that some objects, phenomena related to the body exist there. Apparently, our personal attention can be the first tool for such research. In the spiritual literature there are often techniques that require one to purify one's mind of everything, so that attention will not be dependent on the senses. Perhaps then it will be fully immersed in its own local time. In the same way that the cubit was used to measure length, which led to cartography, then geometry, the first sciences to study the properties of space and bodies.

CONCLUSION

From all of the above, several conclusions can be drawn, though only on historical and religious considerations. The reason was mentioned above that there is no scientific approach to this issue.

So, all material bodies of space have their cyclic imprint in the form of their own local time.

There are objects of space devoid of local time [2], for example, photons moving with limiting velocities. If there are objects entirely located in local time, they are neither observable nor comprehensible by traditional methods using spatial research tools.

Recognizing the existence of a non-spatial component in humans, one can interpret this phenomenon as a soul.

In a sense, souls exist in time just as the human body exists in space.

Faith is the ability to observe objects in local time, which is not one-dimensional and provides a field for study.

Placing the mind's attention in the heart place or upper chest mimics its being in localized time by virtue of the fact that heartbeat and breathing are cyclical processes.

However, it has to be recognized that these inferences rely, for the most part, on assumptions. Therefore, the verification of these conclusions can be carried out only by solving the problem of finding methods for analyzing time in the image and similarity of methods for studying the properties of space, fields and bodies in it.

LIST OF REFERENCES

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