

APPEAL TO PHYSICISTS-EXPERIMENTALISTS

Dear Friends!

I should like to call your attention to the possibility of accelerating elementary particles to superluminal velocities. There are no objective reasons why such velocities could not be attained. The generally accepted view that particles cannot move at superluminal velocities because such velocities are not allowed by the special relativity theory (SRT) is incorrect. The reason why it is incorrect is as follows.

Electromagnetic interactions between bodies depend not only on distances between the bodies but also on relative velocities of the bodies. The SRT seeks to reduce interactions between moving bodies to interactions between the bodies at rest and vice versa. Relativistic transformations (Lorentz transformations) make this reduction possible.

However, if the interactions between moving bodies are described in the first place as functions of relative velocities of the bodies, then the relativistic transformations of space, time, and mass are not needed.

Moreover, the creators of the SRT, being preoccupied with the world ether, became victims of a mistaken belief that, instead of building a theory of interactions between bodies, they were creating a world in which material bodies experience changes in accordance with relativistic relations. And since relativistic transformation equations become imaginary at superluminal velocities, such velocities became forbidden in the SRT.

And yet, a relativistic description of interactions is not the only possible one, other descriptions are possible. Elementary descriptions based on classical physics have been published by G. I. Sukhorukov and co-authors (Russia) [1], T.G. Barnes and co-authors [2], C.W. Lucas, Jr. (USA) [3], and many others. Oleg D. Jefimenko, Professor of Physics at West Virginia University (USA) in his book [4] has presented a method of retarded fields, whose origin can be traced to Oliver Heaviside, which is capable to replace completely the SRT.

In the course of my investigations [5, 6] I have developed a force-based method of describing interactions between bodies as functions of distance and velocity only.

Motions with superluminal velocities exist in nature: streams of matter and fragments of galaxies in the distant cosmical space move with velocities many times greater than the velocity of light; cosmical particles enter the Earth atmosphere at superluminal velocities. I propose to obtain superluminal motions here on Earth.

I invite organizations and individual scientists to participate in this endeavor. Many organizations have everything that is essential in order to accelerate particles to superluminal velocities in accordance with the method proposed in my articles [6, 7]. If necessary, the method can be modified and adapted to the available conditions.

I also propose to make use of the methods that I have developed for designing accelerators and nuclear transmutations. My methods are more accurate and precise than those based on the SRT.

Why do we need to create superluminal motions?

1. For developing new engines for interstellar explorations.
2. For developing a powerful weapon for antiasteroid protection.
3. For creating new technologies.
4. For establishing new goals and perspectives for the mankind.

References

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Yours sincerely,

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