Philippe de Bellescize challenges special relativity: toward a new theory of the Universe and a redefinition of time and space

What if a key foundation of modern physics was based on an error? Since Einstein, special relativity has imposed the idea that time is relative and the speed of light is an absolute constant. These principles, foundational to our understanding of the Universe, underpin everything from GPS technology to cosmology. But a previously unnoticed paradox could call it all into question.

<u>Philippe de Bellescize</u>, philosopher and independent researcher, reveals a major conceptual flaw in special relativity through what he calls the shuttle and missile objection. His analysis highlights a striking contradiction: a single object could simultaneously exist and not exist depending on the observer's frame of reference. Such an absurdity, if confirmed, would challenge the very nature of time, space, and causality.

Through his project In Search of the Theory of the Universe, supported by his books « Et il survolait les eaux » and « Paradoxe sur l'invariance de la vitesse de la lumière », he explores a new path: a Universe where time regains its place, where the speed of light might not be invariant in one-way motion, and where the present moment is a physical reality.

A major scientific debate is at stake. If this flaw is confirmed, physics may have to rewrite some of its most fundamental principles



A key demonstration: The shuttle and missile objection

The block universe concept derived from special relativity suggests that time has no real existence, does not "flow," and that the past, present, and future coexist in a fixed structure.

However, Philippe de Bellescize identifies a flaw in this vision:

- The Shuttle and Missile Objection shows that special relativity leads to an inconsistency where a single object could simultaneously exist and not exist for two observers in motion;
- This challenges the continuity of the existence of moving objects and therefore the idea that simultaneity is purely relative;
- If this contradiction holds, then the invariance of the speed of light in oneway motion is no longer physically tenable.

These conclusions suggest that time has an actual existence and that a universal present moment could exist—contradicting the current view of modern physics.

Toward a new understanding of time and causality

The problem of causality is central to Philippe de Bellescize's inquiry. In special relativity, for certain "acausal" events (located in an inaccessible "elsewhere"), temporal order can be altered without physical consequence. Yet, according to the author, this interpretation neglects that causality is not limited to cause-and-effect relationships, but also concerns the very existence and structure of things.

Accepting this flaw leads to a major conclusion:

- The invariance of the speed of light (in one-way motion) may not be a universal physical reality;
- A present moment could indeed exist for the Universe, challenging the block universe concept and opening the door to a new vision of space-time.

This hypothesis aligns with some contemporary reflections, notably by Lee Smolin, who has pointed out the limitations of the block universe in his work on loop quantum gravity. It also echoes Carlo Rovelli's ideas, who sees time as a relation between states rather than an absolute variable.

A demonstration that can be experimentally verified

Far from being purely theoretical, this challenge to relativity could be experimentally tested. A crucial experiment would involve measuring the speed of light in a previously unexplored situation:

• Placing an interferometer in a fast-moving spacecraft, rather than in a terrestrial frame (as in the Michelson and Morley experiment).

Using this method, as proposed by Henri Vidersan, would allow testing whether the speed of light is truly independent of the frame of reference or if it varies, even in non-curved space. Indeed, if the speed of light depends on spatial configuration, then the spacecraft case is not equivalent to Earth's.

This experiment could offer concrete answers on the nature of space-time and the limits of special relativity.

Books exploring this new theory

« Et il survolait les eaux - Vers une nouvelle vision du monde physique? »

This book lays the conceptual groundwork for the project *In Search of the Theory of the Universe*. It explores how the driving principle of the physical world operates immanently and through interrelation, and how this dynamic necessitates a redefinition of fundamental concepts in physics.

It promotes a new interpretation of space-time that is more realistic and consistent with the existence of physical bodies.

Philippe de Bellescize

Et il survolait les eaux vers une nouvelle vision du monde physique ?



« Paradoxe sur l'invariance de la vitesse de la lumière »

This work is entirely devoted to the Shuttle and Missile Objection. It demonstrates how special relativity fails to account for the continuity of a body in motion and why the speed of light cannot be invariant in all situations.

A detailed analysis of the contradictions within special relativity, paving the way for a conceptual overhaul of time and space.

These books, available online, invite the scientific community and physics enthusiasts to explore the arguments and assess their validity.



An interdisciplinary approach: philosophy meets physics

From its origins, science was built on a dialogue between philosophy and physics. The earliest physicists were philosophers seeking to understand the nature of the world. Today, this relationship is drifting apart, potentially limiting reflection on the very foundations of knowledge.

In this spirit, Philippe de Bellescize offers a transdisciplinary approach, where philosophy sheds light on gaps in some scientific interpretations. He argues that true progress in understanding the Universe will only emerge by embracing a broader vision, beyond the rigid frameworks of contemporary physics.

He draws from Aristotle's definition of time ("time is the number of motion") and uses Carlo Rovelli's analyses to show that time can be conceptualized without falling into tautology. This reflection could redefine our relationship with physics and spark a new paradigm.

A call for scientific and philosophical debate

The project *In Search of the Theory of the Universe* is aimed at both scientists and philosophers of science. Its ambition is clear:

- To engage in a debate on the limits of special relativity and the existence of a universal present moment;
- To stimulate interdisciplinary reflection on the nature of time, causality, and the fundamental principles of physics;
- To encourage new experiments to test the variability of the speed of light.

In the face of academic resistance, Philippe de Bellescize emphasizes the importance of dialogue and open-mindedness. Physics has always advanced through critical minds who dare to question what seems obvious.

Today, a major question arises: what if our current understanding of time and space is incomplete?

About Philippe de Bellescize

After studying philosophy and theology at the St. John School (bachelor's degree in philosophy), Philippe de Bellescize pursued training in computer science and artificial intelligence.

He bridges his dual passions—philosophy and science. After five years of religious commitment, including temporary vows, he returned to civil life, working in computing while continuing his metaphysical inquiries.

Since the 1990s, he has engaged in philosophical research on the universe, leading to the publication of several books on the subject.

He discovered the operational mode of the Driving Principle of the Physical World: "an immanent action through interrelation, based on the determination of elements"—a concept rarely explored in philosophy, to his knowledge. He found that this idea almost inevitably leads to a completely relational conception of space-time.

For over a decade, he has recognized that this relational view is not entirely compatible with relativity. This led him to search for objections—until he found an undeniable one: the "Shuttle and Missile Objection."

Learn more

Website: https://www.leprincipemoteurdelunivers.com

Paradoxe sur l'invariance de la vitesse de la lumière

• Éditions L_Écritoire : https://www.lecritoire.fr/products/paradoxe-sur-linvariance-de-la-vitesse-de-la-lumiere

Et il survolait les eaux - Vers une nouvelle vision du monde physique?

• Éditions L_Écritoire : https://www.lecritoire.fr/products/et-il-survolait-les-eaux

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