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The final equation of Light Speed

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Abstract

According to this theory, the speed of light remains constant because photons are pulled by a universal, invariant force of attraction. This theory is entirely based on physical principles and does not require any additional hypotheses to explain why light always moves at a fixed speed.

To validate this theory, mathematical equations, physical laws, and experimental verification have been considered.

Fundamental Concept

Photons and Universal Attraction

When a photon is emitted from a source, it immediately loses contact with the source and starts moving due to universal attraction.

Photons do not generate any force on their own; instead, they are entirely dependent on the universal attraction (Fu).

This attraction operates independently of the motion of the source and always pulls the photon at a constant speed of 299,792,458 m/s (as measured in physical experiments).

The π-dimension attraction is a fundamental property that governs the speed of light. To fully understand the π-dimension attraction, refer to My theory, The Ultimate Theory of Everything (Author: Kuldeep Singh Meel).

Mathematical Model

1. Relationship Between Universal Attraction and Photons

The mass of a photon (mf) is extremely small, but it is pulled by the universal attraction.

The relationship between universal attraction (Fu) and photon mass (mf) is given by:

$Fu = mf \bullet c$

2. Determining the Speed of Light c

$C = Fu / mf$

Since Fu is universal and invariant, and mf is extremely small, the speed of light remains constant.

This is why the motion of the source does not affect the speed of light.

Experimental Verification

1. Rocket Experiment

If a light source is placed in a rocket moving at high speed (either forward or backward), the speed of light remains unchanged.

Reason: As soon as a photon is emitted, it becomes independent of the source's motion and is solely pulled by the universal attraction.

2. Stability Test

The speed of light has been measured in different directions and under various conditions in laboratories, and it always remains the same.

Regardless of the speed or motion of the source, light always travels at 299,792,458 m/s.

Key Conclusions

1. The speed of light does not depend on the source, as photons detach from the source upon emission and move solely due to universal attraction.
2. Light will always exhibit the same speed in any reference frame because it is pulled at a constant rate by universal attraction.
3. This theory defines the speed of light purely through physical principles, without the need for imaginary or abstract concepts.
4. According to this theory, the speed of light is governed by a fundamental attraction force that operates uniformly across the universe.

Conclusion

This theory clearly establishes that the speed of light is independent of any external reference frame and is instead determined by universal attraction.

The relationship between the force of attraction (Fu) and the mass of a photon (mf) aligns with all experimental and mathematical equations.

Based on this theory a new and scientifically solid perspective on the nature of the speed of light in physics has been presented.