

Time in Heracleatean Dynamics

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Abstract: The consistency of time in Heracleatean dynamics has been discussed.

Keywords: Heracleatean dynamics, arithmetic and geometric time

1. INTRODUCTION

The subject of interest of this paper is to discuss the consistency of time of matter in Heracleatean dynamics.

2. TIME

In Heracleatean dynamics fundamental time of matter is composed of particle time and wave time at ground circumstances as follows [1], [2]:

$$t_{matter} = t_{particle} + t_{wave} = \sqrt{\frac{h}{c^3}} + \frac{h}{m_{ground}c^2}. \quad (1)$$

Where h = Planck constant, c = speed of light and m_{ground} = ground mass. Such time of matter is inconsistent since being dependent of the mass means that the whole mass of matter has a shorter time than its lighter parts. For instance, for the infinite ground mass and for its infinite lighter parts holds:

$$t_{matter}(m_{ground} = \infty) = \sqrt{\frac{h}{c^3}} < t_{matter}(m_{ground} = 0) = \infty. \quad (2)$$

We will try to offer a solution to the concerned problem.

3. THE ARITHMETIC TIME

Previously mentioned inconsistency can be a consequence of the arithmetic sum of both times which follow one another. Here the time consistency of the whole matter can be achieved by means of a negative arithmetic time. Thus:

$$t_{matter} = t_{particle} + t_{wave} + t_{arithmetic}. \quad (3)$$

Where

$$t_{arithmetic} = -t_{wave}. \quad (4)$$

If so, because of the arithmetic sequence of positive and negative wave time (t_{wave} , $-t_{wave}$) one could detect a wave part of the event twice. First time, for instance, at the beginning of the wave time:

$$t_{matter} = t_{particle}. \quad (5)$$

And second time at the end of the wave time:

$$t_{matter} = t_{particle} + t_{wave} - t_{wave} = t_{particle}. \quad (6)$$

4. THE GEOMETRIC TIME

Previously mentioned inconsistency can be a consequence of the geometric sum of both times which run perpendicular to each other:

$$t_{matter}^2 = t_{particle}^2 + t_{wave}^2. \quad (7)$$

Here the time consistency of the whole matter can be achieved by means of an imaginary geometric time. Thus:

$$t_{matter}^2 = t_{particle}^2 + t_{wave}^2 + t_{geometric}^2. \quad (8)$$

Where

$$t_{geometric}^2 = -t_{wave}^2. \quad (9a)$$

Or

$$t_{geometric} = it_{wave}. \quad (9b)$$

If so, because of the geometric pair of real and imaginary wave time (t_{wave} , it_{wave}) one could not detect a wave part of the event since the geometric sum of wave time is always zero:

$$t_{matter}^2 = t_{particle}^2 + t_{wave}^2 - t_{wave}^2 = t_{particle}^2 + 0 = t_{particle}^2. \quad (10a)$$

Or

$$t_{matter} = t_{particle}. \quad (10b)$$

5. CONCLUSION

The arithmetic and the geometric time can solve the inconsistency of time in Heracleatean dynamics ensuring that the same time belongs to matter independently of its ground mass.

DEDICATION

To happy jump into the New Year 2021

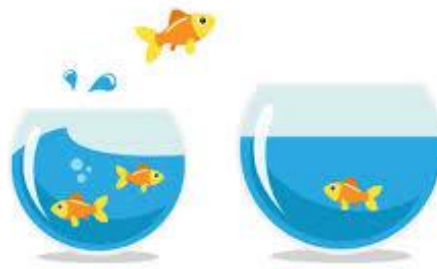


Figure1. *Happy jump*

REFERENCES

- [1] Janez Špringer, (2020). Matter Obeying Heracleatean Dynamics. *International Journal of Advanced Research in Physical Science (IJARPS)* 7(10), pp.15-17, 2020.
- [2] Janez Špringer, (2020). Neutrino Mass and Energy Obeying Heracleatean Dynamics (Third time's a charm). *International Journal of Advanced Research in Physical Science (IJARPS)* 7(11), pp.1-3, 2020.

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