Origin and Nature of Speed of Light shown on one page of paper

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Abstract

Following the ideas presented in "Search for the World Formula"[1] and "Unified Principles of Nature"[2] as well as in tentative "General Quantum Relativity"[3] it was presented a novel combination of mathematics and physics for quantization of the 3 Dimensions of space (L^3) to 5 Dimensions space-time (L^3T^2). Here is a brief excerpt at a glance on one single page to show the true nature of the "constant" "speed of light in vacuum" and to what extent the existence of this constant c proves that spacetime in reality is 5-dimensional.

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[1] Pohl M.U.E (2022): Search for the World Formula, Scientific God Journal Vol 13 No1, https://scigod.com/index.php/sgj/article/view/781 or

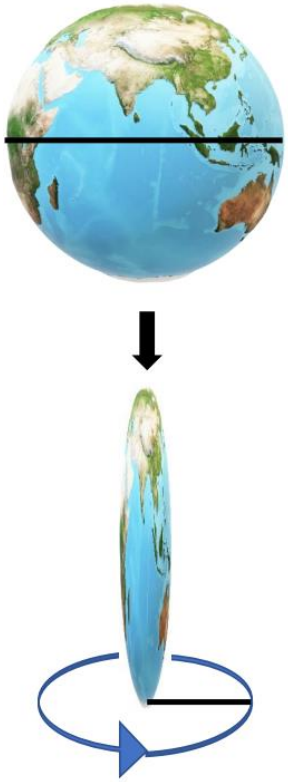
[2] Pohl M.U.E (2019): Unified Principles of Nature, Scientific God Journal Vol 10 No3, https://scigod.com/index.php/sgj/article/view/669

[3] Pohl, M.U.E. (2022): General Quantum Relativity and Gravity Mediated Entanglement in quantized 5D (L3T2) Spacetime; https://www.researchgate.net/publication/365199644_General_Quantum_Relativity_and_Gravity_Mediated_Entanglement_in_quantized_5D_L3T2_Spacetime

How to refute Einstein and Maxwell on one page

Explanation of the nature of the speed of light. (Finding the 5th Dimension)

In order to construct a coordinate system (3D Space) in which the axes are perpendicular to each other, we need two 90° angles. To do this, we introduce three spatial axes (Dimensions L) L^3 with a uniform measure (Diameter of the sphere) D = 1 meter. In order to construct an angle of 90°, we need two time axes (Dimensions T) T^2 for the two radians of the spherical coordinates.



The relationship $T_2 = (\pi / L)\ T_1$ applies
Here, as both time axes represent the needed angle of 90°. As for L_1 , L_2 and L_3 the Unit is given with D =1 Meter we write $T_2 = (\pi / D)\ T_1$ in order to relate and calibrate this spatial unit to the both angular units T_1 and T_2 . Doing this we get all 5 Dimensions related and calibrated to each other for measurements in the our universe.

As the equatorial diameter of earth (axis of T_1) is needed, we use the data from WGS (World Geodetic System 84[4] (12756274 Meter), and for T_1 we use the originally (until 1956) arbitrarily defined rotation duration of 86400 seconds;

$T_2 = (\pi / 12756274m) \cdot 86400s = 0{,}02127843956\ s/m$

While T_1 is referring to a rotational motion in 2 dimensions in space, T_2 is referring to a motion in straight line (2·90° angles = 180°). Therefore the “speed of light in a vacuum” is given with relating the radius of earth to T2 :

$C_{(Speed\ of\ light\ in\ a\ vacuum)} = Radius_{Earth} / T_2 = 299746463{,}2\ m^2/s$
Or simple $_{(Speed\ of\ light\ in\ a\ vacuum)} = Diameter_{earth}^2 / (2\pi\ Day_{earth}) = 299746463{,}2\ m^2/s$

(To understand the difference in dimension, please read the detailed explanation in the linked articles)

The deviation of this calculated speed of light is - 0.0154% to the value of the speed of light 299792458 m/s defined by CODATA[5] (Comitee on Data for Science and Technology).

The deviation of -0.0154% corresponds to about 982 meters for each opposite tangent of the earth's surface. This inaccuracy is easy to explain, since the sea depth at the equator is largely up to 4000 meters and water is less dense than the land masses.

[4] https://de.wikipedia.org/wiki/World_Geodetic_System_1984
[5] https://codata.org