



SDI Review Form 1.6

Journal Name:	Physical Science International Journal
Manuscript Number:	Ms_PSIJ_50248
Title of the Manuscript:	Dilation of Time and Newton's Absolute Time
Type of the Article	Original research paper

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	<p>The abstract needs to be rewritten: I understand that the author wishes to review the cosmic membrane theory. This should be stated in the abstract. Also, please do not confuse the reader in the abstract by using strange acronyms, e.g., SR for Einstein's relativity. Please be specific regarding line width by indicating a numerical value. Finally, and in view of the conclusions that indicate reference to quantum mechanics, what would be the operator for time-measurements if one were postulated by the author.</p> <p>Please keep in mind that in the theory of gravitation, time and space coordinates are treated on the same footing, in other words, the metric tensor treats time and space equally. Consequently, if there were a t_0 then there must be a x_0, y_0, z_0.</p> <p>The conclusions start with "Accepting Newton's absolute space," – this is exactly why Newton's theory failed: Everything is "relative" and an absolute space is not required!</p> <p>In summary, the article confuses advancement in theoretical Physics especially during the last 150 years. Unless completely re-written as a "point of view" I would suggest to avoid publication.</p>	<p>We thank you very much for your contribution</p> <p>For example, the H_α-line of the Balmer series of hydrogen with $\lambda=656.4$ nm has a thermal line broadening of $\Delta\lambda= 0.0036$ nm at the temperature of 60 K, and at the temperature of 6000 K a thermal line broadening of $\Delta\lambda= 0.036$nm. The natural line width for the H_α-line is $\Delta\lambda\sim 2\times 10^{-5}$ nm.</p> <p>Finally, and in view of the conclusions that indicate reference to quantum mechanics, what would be the operator for time-measurements if one were postulated by the author. There is no operator for time measurement in quantum theory. In this sense, time is not measurable. But practically, a clock is our operator. The Cosmic Membrane theory is a theory of the space. Time is a property of processes.</p> <p>Please keep in mind that in the theory of gravitation, time and space coordinates are treated on the same footing, in other words, the metric tensor treats time and space equally. Consequently, if there were a t_0 then there must be a x_0, y_0, z_0. Time t_0 is when the clock starts. The spatial coordinates x_0, y_0, z_0 are anywhere. One defines this point in the absolute space. It is a question of convention similar to the beginning of our common era, or the definition of the zeroth degree of longitude in Greenwich. Besides, in the Cosmic Membrane theory, the time is not important for the gravity and other effects (see [vEvW1, vEvW4]).</p> <p>The conclusions start with "Accepting Newton's absolute space," – this is exactly why Newton's theory failed: Everything is "relative" and an absolute space is not required! Naturally, each movement is relative, even doubly in the Cosmic Membrane theory, i.e. motion is relative to the absolute space, and otherwise relative between two moved inertial frames. In the Cosmic Membrane theory, gravity can be easily explained, and, additionally, the theory provides access to the nature of dark matter.</p> <p>In summary, the article confuses advancement in theoretical Physics especially during the last 150 years. Unless completely re-written as a "point of view" I would suggest to avoid publication. The Cosmic Membrane theory is conform with Einstein's theory of relativity by more than 90 %. The deviations are well founded (see [vEvW1 to vEvW5]), and the published results are steps on the way to the truth. In our section "Introduction", we have listed a lot of strong evidence. That is our legitimation.</p> <p>New abstract The Cosmic Membrane theory states that the space in which the cosmic microwave background radiation has no dipole is identical with Newton's absolute space. Light propagates in this space only. In contrast, in a moving inertial frame of reference light propagation is in-homogeneous, i.e. it depends on the direction. Therefore, the derivation of the dilation of time in the sense of</p>



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		Einstein's special relativity theory , i.e., together with the derivation of the length contraction under the constraint of constant cross dimensions, loses its plausibility, and one has to search for new physical foundations of the relativistic contraction and dilation of time. The Cosmic Membrane theory states also that light paths remain always constant independent on the orientation and the speed of the moving inertial frame of reference. Effects arise by the dilation of time. We predict a long term effect of the Kennedy-Thorndike experiment, but we show also that this effect is undetectable with today's means. The reason is that the line width of the light sources hides the effect. The use of lasers, cavities and Fabry-Pérot etalons do not change this. We propose a light clock of special construction that could indicate Newton's absolute time t_0 nearly precisely. <i>Keywords: Dilation of time; relativity; membrane; absolute space; Kennedy-Thorndike experiment</i>
Minor REVISION comments		
Optional/General comments		

PART 2:

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	