



SDI Review Form 1.6

Journal Name:	Physical Science International Journal
Manuscript Number:	2015_PSIJ_21549
Title of the Manuscript:	Extending the Classic Conclusions in Lorentz Transformation for Super Natural Relativity
Type of the Article	Original Research Article

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.

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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)
<u>Compulsory</u> REVISION comments	The main result of the manuscript is eq.(3) and (4), in which the author wants to modify the original Lorentz transformation into a form with an additional time coordinate and another "quantum entanglement speed", there are many flaws in the manuscript. Firstly, the exact definition of the operation in eq.(3)(4) is not presented. Secondly, the physical meaning of the direct product of two 2-dimensional subspaces is not clear (Also, the full Lorentz transformation is 4-dimensional). Thirdly, the conclusions in Section 2 are trivial, since the calculation is just to compute the inverse matrix, without any new result.	The main definition is eq. (3) and (4), the main result is actually the Theorem A, where we are trying to show that the Lorentz transformation can be extended to non-homogeneous world, where both time and the space behaviour differently in different directions. The full Lorentz transformation is indeed of 4-dimensional, but with 3 of 4 dimensions are pretty much exactly the same, i.e. homogeneous in any one or combinations of space directions, so is 1 of the 4 dimension which is a plain time. The exact definitions of the operations are further defined and emphasized in the revised version, point well taken, all equations are with number now for easier reference. The physical meaning of the direct product is that the perpendicular subspaces are independent with respect to each other, since the original Lorentz transformation is of 2-dimensional, we would like to extend it step-by-step. Our next paper will address the higher dimensional cases. During our work, we noticed that without the new definition of operations, the correct inverse matrix, that leading to the backward compatible conclusions there after, can not be obtained. In another word, a trivial inverse matrix does contain flaw against quadratic nature. To remove the flaw, the new mathematical operation is introduced.
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments		