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Journal Name:	<a href="#">Physical Science International Journal</a>
Manuscript Number:	Ms_PSIJ_30616
Title of the Manuscript:	Structure Equations, Permitted Movement of Relativistic Continuum and Sagnac's, Erenfest's and Bell's paradoxes
Type of the Article	ORIGINAL RESEARCH ARTICLE

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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)
<b><u>Compulsory</u></b> REVISION comments	Many of the issues, (approximately full) are misunderstood by the author. The connections between the subjects related to the relativistic mechanics are set up very stranger-being, very recruit-being. Also the English language of the manuscript is very insufficient	<p>Dear Reviewer, Your question is not quite clear for us. A common opinion to estimate such works does not exist. Somebody may like it but somebody may dislike it. It is quite normal. If we get right, you dislike that besides the motion equation for the relativistic continuum corollary restraints for the rigidity and rotations are introduced. The equations set will be redefined!</p> <p>Seemingly, the motion equations are quite enough. However, the continuum is used to describe co-moving frames of reference that properties demand the rigidity and rotation restrictions. Let us consider the example.</p> <p>We want to calculate the field of uniformly accelerated charge in the system connected with the charge. How do uncharged particles move? We pass into the noninertial reference frame (NRF) moving together with the charge. Let us connect the origin of coordinates with the charge. What would the NRF be in order to its structure exactly images the field structure of the charge outside of this charge?</p> <p>Such a problem in the inertial reference frame (IRF) for the charge being at rest does not exist, as the IRF space is homogeneous and isotropic.</p>



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		<p>Obviously, the NRF structure has to be rigid and the acceleration of each particle of the NRF body has to be equal to the charge acceleration.</p> <p>That is physical conditions in the observation point of the charge field have to be similar as ones in the point of the location of this charge. In this case, in the observation point, charge field distortions depending on the properties of the reference frame are minimal.</p> <p>In the Minkowski space in the special relativity theory (SRT) such a system does not exist!</p> <p>The Möller-Rindler system is a relativistic rigid one (in the Born sense), but it is not a global uniformly accelerated system as the particles of this system move with identical accelerations but these accelerations are not equal each other and they are not equal to the charge acceleration except the medium particle at the origin of coordinates.</p> <p>However, in the theoretical physics, most authors are mistaken and this system is considered as the relativistic uniformly accelerated one [5].</p> <p>The Logunov's system is an alternative to the the Möller-Rindler system. The Logunov's system is a motion of a charged dust in a homogeneous constant electric field with zero initial velocities. However, neither the Möller-Rindler system [2] nor the Logunov's system [3] are both Born rigid and relativistic uniformly</p>
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		<p>accelerated ones!</p> <p>The Logunov's system does not move in a Born rigid way and the particles in the system connected with the charged dust run off each other.</p> <p>Thus, The Möller-Rindler system is a relativistic rigid one, but it is not a global uniformly accelerated system. The Logunov's system is a global uniformly accelerated one, but it does not move in a Born rigid way!</p> <p>We got a paradox, which can't be solved in SRT, that results in the Bell paradox considered in the article.</p> <p>This paradox can't be solved in the general relativity theory (GRT)!</p> <p>We find a rigid system (in the Born sense) that simultaneously is both a relativistic rigid one and a globally uniformly accelerated one. One realizes this system in the pseudo-Riemannian space.</p> <p>The NRF curvature does not directly relate to the GRT curvature, but the structure equations obtained in the article affect possible solutions of the Einstein equations.</p> <p>Results of this article are original and in practice these ones haven't seen before somewhere. [6] is the pioneer article and after seven years these results were partially repeated in [10, 11].</p> <p>The structure equation is a basic to the theory. For the first time it was obtained in [6] where the relativistic rotational NRF both in the</p>
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		<p>Riemannian space-time and in the metric connectivity space with torsion was determined. Definite applications of the theory were used in the authors' books [15-18] and in article [34].</p> <p>Acknowledgements. The authors would like to thank the reviewer for valuable comments.</p>
<b><u>Minor</u></b> REVISION comments		
<b><u>Optional/General</u></b> comments		