

**THEORETICAL AND EXPERIMENTAL DISPROOF OF
SRT - GRT & 'SPACE -TIME' / THEORIES
&
EARTH'S ETHER ATMOSPHERE BEFORE OUR EYES
(ETHERIC) PSEUDO -"RELATIVISTIC" PHYSICS**

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Abstract. SRT - GRT (and any '*space & time*' theory) are pure mathematics and have nothing to do with Causal Physics. Breakings of the macroscopic Causality by non-Galilean transformations. "Relativity Principle" excludes the introduction of Lorentz Transformations. "Equivalence Principle" is erroneous and contradictory to Eddington-Schwarzshild's GRT. SRT/ GRT unclear amalgam! The double failure of GRT to explain Hafele-Keating experiment on time. Hafele-Keating experiment shows surprising similarities to both the Michelson-Morley and Michelson-Gale classical optical experiments. These analogies are fatal for SRT & GRT. "Earth's Ether Atmosphere" (EEA) ie Stokes' model of ether (1845) is just before our own eyes. Every assumed "Relativistic"- (of SRT or GRT) - phenomenon, law, or experimental test in reality is ruled by Classical Physics!

1. Theory Dictates: "Non-Empty" Vacuum!

It is generally believed by past and present generations of physicists that physical free vacuum space is not simply an empty space; instead, it has been endowed with some complex and very specific properties, such as: (a) The propagation of the electromagnetic wave or photon, (b) The propagation of the gravitational force (probably), (c) The appearance of the inertia ie the resistance of material bodies to acceleration, (d) Various properties under the general label "vacuum state", which need Quantum Field Theories and the related "Elementary" Particle Physics (of course different theories use and different models for the description of the "vacuum state"), (e) To complete the "missing", "invisible-dark" mass of the galaxies or of Universe, (f) To obey a fractal-like model for the organization or appearance of the "matter" etc.

2. Life -Time and Mass Variations Prove the Non-Emptiness of Vacuum

Let us consider an "entity" (particle) from the Atomic Physics, moving with a constant velocity in the free space. Its own "state", "nature", and "proper function" remains independent of the number and the "state" of "motion" of the co-existent macroscopic coordinate frames and observers in the space around. This atomic "entity" cannot "perceive" or "feel" (by itself) its constant motion in empty vacuum space or relative to any coordinate frame "moving" or "not-moving" in empty vacuum, so to change its own parameters; in other words:

1) Into the absolutely empty vacuum space, there is no “criterion” of “motion”.
2) Each one atomic “entity” “feels” to be in the “state” of “no-motion”. 3) In the absolutely empty vacuum space no changes of the masses of the fast “moving” particles and no changes of “*life-times*” of the “moving” unstable particles would occur!

[At this point we have to remember the empty vacuum space of SRT. There, the assumed validity of the symmetric LT leads the two “observers-clocks” “A” and “B” (which are moving the one relative to the other and had been synchronized at their meeting) to apply two contradictory symmetric “time-dilation”- calculations!].

The evidences then for the “non-empty” vacuum are the real changes of the masses of the fast moving atomic particles, and the real changes of the lifetimes of the fast moving unstable particles! The atomic particles do “feel” their own motion through the “medium” and change their own properties or parameters.
(A flag waves when it be in a region where the air flows relative to it; then and only then the flag “perceives” its relative motion though the air. The flag by no means waves in absence of the air!)

3. The Light / Electromagnetic Waves Imposed “Luminiferous” Ether

Our own present purpose is not to “unify” physics but only to explain the behavior of light. Today the light waves and the electromagnetic ones mean the same thing, but was some epoch in which there were only the waves of light. The wave-behavior of light had imposed originally the existence of a vibrating carrier ie the “*luminiferous aether*” or simply ether. Later Maxwell had formulated his own electromagnetic theory on the basis of some very concrete “mechanical” properties of the “ether medium”. The detection thus, by Hertz, of the electromagnetic waves had also proved of course and the existence of the “carrier” ie ether. With this ether physicists had a better understanding to the terms: “*field*”, “*no field*”, “*vacuum energy*”, “*vacuum state*”, “*vacuum currents*”, “*vacuum fluctuation*” etc which are used in Field Physics.

4. The Constancy of the Speed of Light is Property of the Ether!

Additional evidences for the existence of the “luminiferous ether” emerge when we try to consider and test experimentally the properties of the speed of propagation of light through the ether-medium. Classical Ether Physics teaches that: At any point, in free space (filled with ether), the speed of light must be:

(1) Independent of the direction of propagation (=macroscopic homogeneity of ether). (2) Independent of the traveled distance or any “prehistory” of light ray.
(3) Independent of the velocity of the emitting source. (4) Independent of the kind of the light source and its color.

There absolutely is not any experiment or observation yet, which would disprove the propositions (1 to 4)! And this of course means that luminiferous ether exists! Even SRT recognizes that above (1 to 4) properties are in rule! Einstein had assumed them as valid and for all inertial frames “vanishing”-in words- the ether!. Tolman [1] notes about the property (3): “*At the time of Einstein’s*