

So let's continue.

Including, say, the absolutely fundamental – “Logos” set element “Time” really relates to 3 other “Logos” set elements - “Change”, “Energy”, “Inertia”. All these 4 “Logos” set elements are logically interlinked because that “Change” is logically self-inconsistent. So there logically cannot be some “instant” changes of state of anything – in this case so former, recent and future states are the same, when by “change” definition the states are different.

This logical prohibition of changes is overcome by/at two points: to change something it is necessary to spend some portion of **energy**, but that isn't enough, and on some level of changing the state is uncertain – “illogical”. In Matter this happens on **QM scale that just because of the above exists**. Thus “Inertia” is logical resistance to changes, Matter is rather simple logical system, and so **energy** and **inertia** can be – and in physics are – measured.

Since changes fundamentally cannot be instant, they happen in fundamentally non-zero interval of something, in everyday practice and physics this something is called “time”, what is actualization of “Logos” set element “Time”, first of all that the all/every changes' time intervals are **only in absolutely universal unique for all/every changes** of/in all/every of absolutely infinite “number” the “Information” Set's elements “**time dimension**”; at that at every change the changed element moves only in one – “positive” time dimension axis direction – in other words that is “time arrow”.

Besides – **at that absolutely for sure there cannot be any “time dilations”**.

“Space” is also “Logos” set element, and absolutely for sure is actualized for any/every Set's element, including the system “Matter” – every IPS can exist absolutely obligatorily in some – but in fundamental contrast to Time – concrete, “space”. The space has concrete nomenclature and number of “space dimensions”; what is completely determined by nomenclatures and number of degrees of freedom of basic elements an IPS is constructed of which[say the space “paper sheet” for creating of IPS “a text” is 2D, since the basic elements “letters” have two degrees of freedom to exist].

The second [see the SS post above] base of the SS&VT PSIP model are two really fundamentally foundational for physics XX century findings – the von Weizsäcker 's 1954-55 “Ur hypothesis”, where he showed that for Matter be organized basing on binary logics - and so concretely on binary fundamental elements - Matter's space should be 3D – as the space is 3DXYZ really;

- and Fredkin-Toffoli late 1969s finding that if in a system of elements interactions are reversible, at the interactions the system's energy is constant [say, in contrast to Landauer principle],

Correspondingly in the PSIP model in accordance with the findings above it is postulated that everything in Matter is/are specific disturbances in the Matter's ultimate base - (at least) [4+4+1]4D dense lattice of primary elementary logical structures – (at least) [4+4+1]4D binary reversible fundamental logical elements [FLE], which is placed in the corresponding Matter's fundamentally absolute, fundamentally flat, fundamentally continuous, and fundamentally “Cartesian”, (at least) [4+4+1]4D spacetime with metrics (at least) $(ct, X, Y, Z, g, w, e, s, ct)$, FLE “size” and “FLE binary flip time” are Planck length, l_P , and Planck time, t_P .

Further basing on again completely scientifically rational assumptions that particles are created in the lattice by $4D_{ct, X, Y, Z}$ momentums $P=mc$, m is inertial mass, c are 4D velocities that have identical modulus $c=l_P/t_P$, and so in the model most of basic fast bodies kinematics and dynamics [that are in SR] equations – Lorentz transformations, $E=mc^2$, etc, are derived; by completely scientifically rational assumption that fundamental Nature at least Gravity, Electric, and

NUcler/Strong forces mediators act by one scheme the values of corresponding the Forces' strengths, G , fine structure and [strong] g , constants are derieved, etc. –really practically all points in the Kurt Klingbeil quote in the previous SS post above are clarified; and a number of directions at real physics development on the way “classical” physics→ QM → Planck scale physics are determined. Etc. more see the linked papers.

Cheers

<https://www.researchgate.net/post/Does-a-gravitational-field-have-energy-density-like-an-electric-field/220> ***** 05-09-05-26, page 220

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@Kurt,

- you again post some AI's text, when I wrote already that now AIs know only what they learned at reading mainstream publications, first of all when relating to any really fundamental problem, pop-scientific ones; and, if write about some really fundamental problems,

- since, again – see the SS posts above – in mainstream philosophy and sciences, including physics, all really fundamental phenomena/notions, first of all in this case “Matter”, “Consciousness”, “Space”, “Time”, “Energy”, “Information”, **are fundamentally completely transcendent/uncertain/irrational** – so really all “fundamental” mainstream publications really logically inevitably are only some scientifically by no means scientifically rationally substantiated transcendent mental constructions.

So the AIs also write really unscientific transcendent somethings – but seems doesn't suspect that to write about material objects/systems, energy, space, time, etc., it is necessary before to understand really scientifically what that is/are. Besides your AI seems doesn't understand what the notion “proof” means, so for it everything that it learned in the mainstream physics is undoubtedly true. – up to, say, claim

“...*Logical vs physical arguments.*”

- in any real sciences, including physics, **absolutely principally cannot be any contradictions between logical and scientific arguments.** If a contradiction exists, that really means that the scientific arguments are wrong/irrational. And this is independently on – in what science the true logical arguments are formulated, and in what science these argumenta are concretely applied.

Including, say, when the AI writes that physical and philosophical approaches are principally different, and so application of philosophy in physics is quite incorrect, that is completely correct, if relates to mainstream philosophy, which really - since philosophy 2500 years was defined as the science that studies just fundamental phenomena/notions and corresponding problems - attempts to do this till now, but till now really it is a set of numerous theories, doctrines, schools, etc. that are based on fundamentally transcendent beliefs in real existence and real actions of transcendent omnipotent and omniscient “Matter”, “Ideas”, so on, from which numerous mainstream “ontologies” and “epistemologies” of the phenomena/notions above.

Correspondingly all what the AI writes about SS&VT 2007 “The Information as Absolute” conception, is completely incorrect. In the conception **really scientific philosophy** is presented, since it is rigorously logically perfectly substantiated, i.e. **is based** [more see first dozen of pages in <https://www.researchgate.net/publication/363645560> *The Information as Absolute - 2022 ed*]

- on **rigorous proof of existence** of “Information” that exists as some informational patterns/systems of the patterns [IPS] that are elements of the absolutely infinite “Information”

Set,, which exists absolutely always, having no Beginning and End since absolutely – logically - cannot be non-existent; and

- on **proofs of self and mutual consistence and completeness** of basic points in the conception - “Properties” in the link above. In the conception it isn’t proven **uniqueness** - that is impossible since humans consciousnesses are IPSs in the Set and so fundamentally cannot know about anything else, however in this case that is inessential – since everything is observed as something that can be described by some IPSs, follows that this everything is are only IPSs; moreover for the everything existence only as IPSs there is no necessity in anything else..

The set of points –[**existence, self-consistence, completeness**] above is **necessary and sufficient** set, **the consistence with which rigorously proves truth of a theory, concept,** etc., in this case – of the “The Information as Absolute” conception, while any/every scientific theory, including physics - besides the purely humans consciousnesses product “mathematics”, where in basic theories the proof of existence is unnecessary this problem is solved by “let A is...”, “let B is...”....,

- however that fundamentally isn’t so in mainstream philosophy and natural sciences, including physics,
- and in fundamental contrast to the conception, the physics by no means answer the questions – what is “Matter” - and so “particle”, field, etc., from where, why and how they appeared and **exist**, etc. **so it is fundamentally impossible to prove its – and any mainstream science’s – truth.** So, again, really all mainstream theories are some transcendent mental constructions that are based on some transcendent postulates;
- when the authors of which even don’t suspect that they really study matter only instinctively using information, having at that no any understanding what word “information” means, and so why they equally exchange and analyze IPSs using logical rules [“Logical Rules” is a “Logos” set element] mystically quite equally at communications with each other and with material objects.

The post is long, so now

Cheers

<https://www.researchgate.net/post/Does-a-gravitational-field-have-energy-density-like-an-electric-field/220> ***** 55-11-05-26, page 220

So let’s continue,

Correspondingly the AI’s “analysis” of SS posts above is a typical set of mainstream really scientifically senseless claims. Say this

“...Logical vs physical arguments.

Your starting claims about “Change”, “Time”, “Energy” and “Inertia” being “logically interlinked” because instant change would be “self-inconsistent” are philosophical assertions, not theorems. In standard physics, time, energy and inertia are connected by well-defined dynamical laws”

- about “Logical vs physical arguments” see previous post; and the SS post earlier, where it is pointed that in mainstream physics really energy and inertia are connected rather strangely – in practically all physics as $E=mc^2$, in Standard Model [really inertial] mass quite also legitimately is created by some strange “Higgs mechanism”, etc..

This

“...“No time dilation” vs established experiments.

You explicitly state that “absolutely for sure there cannot be any time dilations.” That is flatly incompatible with a very large body of precise measurements: atomic clocks on aircraft and satellites, GPS, particle lifetime dilation in accelerators and cosmic rays, et ...”

- again typical mainstream unscientific claim. Really any experimental data fundamentally prove nothing - though it is enough to make one experiment that inconsistent with a theory to prove that the theory is wrong. But, what is more essential, is that in all experimental “confirmations” above really no any “time dilation” was measured. That is absolutely impossible so for this fundamentally no instruments that could measure the “dilation” can exist. All experiments measured only slowing of internal processes in concrete material objects, say, in unstable particles, but for any non-mainstream human it is quite evident that the particles aren’t time; etc. To:

“...Discrete informational lattice vs SR/GR.

You postulate a [4+4+1]-dimensional dense lattice of ... That may be an interesting toy model, but to count as physics it needs to show, step by step, how:

Maxwell’s equations and the standard electromagnetic stress–energy tensor emerge in the continuum limit.”, etc.

- again – since the “Logos” element “Change” is logically self-inconsistent any instant – including continues – changes of states of any IPS, including IPS “particle” and system of particles, including positions in space and time, are fundamentally discrete, and at every discrete step of changes the states are uncertain. Just so in Matter the QM scale exists, where, including, Maxwell’s equations aren’t applicable directly.

Etc, though in this case the FLE lattice discreteness is because FLE has fundamentally [any IPS in the Set fundamentally has] non-zero size.

The post is long, so now

Cheers

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