A general problem for physicists - to understand multidimensional time

Quote from another source: Time is one of the most mysterious aspects of **our theoretical framework** and you know the first person I know who wrote an interesting paper on the possibility of extra dimensions of time was **Andrei Sakharov**. This was before string theory, but the other dimensions of time go back to **Kaluza** and **Klein** in the 1920s and everyone was thinking about it, including **Zeca**, it has problems,…

My reaction: (The Universe doesn't have problems, but **human-physicists have problems with understanding "why" there should be extra dimensions of time**. 3+1D space-time is enough for people... but until then time, until they understand the idea of HDV, i.e. that other extra dimensions exist for the creation, for the production of matter, not "from strings from Nothing", but from those **wrapped three dimensions of time and lengths 3+3D** http://www.hypothesis-of-universe.com/docs/c/c_426.jpg ; http://www.hypothesis-of-universe.com/docs/c/c_421.gif ; http://www.hypothesis-of-universe.com/docs/c/c_416.jpg ; http://www.hypothesis-of-universe.com/docs/c/c_415.gif ; http://www.hypothesis-of-universe.com/docs/c/c_411.jpg ; http://www.hypothesis-of-universe.com/docs/c/c_358.jpg ; ? Because here on Earth we don't observe that time runs **at a different pace** in three axes... We observe "practically" the same time **t = t_1 = t_2 = t_3**, e.g. eg one hour t_1 = 3600.000000032 seconds ; t_2 = 3600.000000030 sec. ; t_3 = 3600.000000030 sec. (I made up the number 32 or 30 for interpretation), even though we know that in many physical situations of "uniform and uneven motion, energy changes", etc., the passage of time is different, e.g. t_1 = 3600,000000036 seconds ; t_2 = 3600,000000030 sec. ; t_3 = 3600.000000030 sec.
Therefore the "scalar" **"t"** is enough for us. The globe is "placed in space-time so cleverly" that **The pace** of the passage of time is in all three components - the dimensions almost the same, respectively the differences are in order up to the eighth place after the decimal point. **c = 10^8/ 10^0** ; A human being is eight orders of magnitude more sensitive to the perception of ***length intervals*** than ***time intervals***. If a ferrari car drives around the autodrome, we will perceive its movement (along the **"x"** line), i.e. speed $v_1 = x_1/t_1$ = 250 **km/h**. = 250,000m / 3600 sec. Rewritten into the 3+3 components of the dimensional grid, the measurement of the dimensions will be written *x* = 250,000m ; *y* = 0m ; *z* = 0m (but be careful, the globe is round, so it will be more precisely **x** = 250000.0 m ; **y** = 0.0000002 m ; **z** = 0.0000003 m..., we practically neglect these small values for **y** and **z**) ; **dtto with time** t_1 ; t_2 ; t_3 ; after measurement are: t_1 = 3600.000000036 seconds; t_2 = 3600.000000030 sec. ; t_3 = 3600.000000030 sec. (I made up the numbers 36 or 30 for interpretation). That is, in the coordinate system x, y, z, t_1, t_2, t_3, we measure changes only in the ***x*** axis and in the ***t_1*** axis; http://www.hypothesis-of-universe.com/docs/c/c_486.jpg If a ferrari turned into a space rocket that increases speed up to…up to **v = 0.8c** ..,
examples are here http://www.ktf.upol.cz/joch/priklady/dilatacep.html ; https://www.walter-fendt.de/html5/phcz/timedilation_cz.htm **and there are also elsewhere** - ...then according to STR, time would dilate on the rocket, of course !!!! it would dilate in the system 3+3D **only in the direction of movement !!!!**, i.e. t_1 = 9.0 sec. t_2 = 500.0 sec. ; t_3 = 500.0 sec., this is not perceived by the missile commander, but is perceived by the Observer from the basic system, and only for the reason that the signal-information arrived "rotated", that is, it flew through a distorted space-time. That is why we sense that STR dilation here on Earth as "dilation", but

there is no dilation on the rocket, there is still $\mathbf{t = t_1 = t_2 = t_3}$ like the one for us on Earth. http://www.hypothesis-of-universe.com/docs/aa/aa_201.pdf

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And yet even 100 years were not enough for millions of physicists to "suck" out of STR my vision that it only shows the rotation of the systems of the basic Observer and the system of the observed object. Gamma-factor contains only length dimensions, time dimension, "véé" speed and "céé" speed. Where v → c . Better said: $\mathbf{v_1 < v_2 < v_3 < v_4 < v_n < c = 1}$. Question: how can and must the test body (with mass) go from some initial speed v1 to speed v_2 and then v^7 and v_{15} ??, but only "via acceleration" "a", that (?), i.e. acceleration a_1, a_2 , a_7 , etc. Well, that's not STR, but OTR…right!, STR doesn't have "a"-acceleration, it doesn't have "how" to get from v_{15} to v_{20} and beyond → c. Well, when testing a body that increases its speed, you will find that it does not happen ``in a straight line", but that it happens along a curve, e.g. a parabola, *(e.g. Vera Rubinová was looking for why in the galaxy there is a higher speed on the periphery than it should be, and similar oddities)* i.e. the body rotates at **v → c**. And then things happen !!, e.g. when observing a quasar, and its red shift, and that the quasar "emits" its light in a direction turned towards us, and therefore Hubble's law does not apply, and... and we are in a >crazy< time. Someone please tell me that STR has nothing to do with redshift…yikes.

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VV: In the end, Dingle wrote it in the book "Science at the Crossroads" that once scientists get hold of something, they are no longer willing to discuss it.

JN: I don't know the specific dispute of Mr. Dingle et al., I don't know what they argued, but in my description (for discussion) it was clear: it was about rotating the systems with the simple argument that under the square root in the "gamma factor" is "general speed "**v**" and maximum speed "**c**". General speed means the scale $\mathbf{0 < v < c}$ ... or written like this:

$\mathbf{0 < v_1 < v_2 < v_3 \ldots < v_n < c}$. So under the square root is $\mathbf{1 - v_n^2/c^2}$. $\frac{1}{\sqrt{1 - v_n^2/c^2}}$. Ordinary logic presents a simple question here: ***how does a body-rocket in motion get to a speed of v_2 ..., then to a speed of v_7..., and then to v_{12}... etc. ??*** Well, it gets so that between the sections with v_3 and $\mathbf{v_4}$ the rocket must fly with accelerated motion $\mathbf{a_{3\text{-}4}}$ …and again, it alternates again, and it repeats again, that is, in order for the rocket to go from speed v_{18} to speed v_{19}, an acceleration must act on it $\mathbf{a_{18\text{-}19}}$ and for a certain time the velocity $\mathbf{v_n}$ rules and for a certain time the acceleration **an** . The velocities "ve" of the rocket correspond to **uniform** STRAIGHT-LINE motion, and the acceleration "a" they correspond to **uneven** CURVILINED motion (a force acts on the body, e.g. gravity) and then of course uneven, accelerated movement is curved, it is, it happens "along curved space-time" according to OTR; and thus the rocket's own system rotates...and we can perceive and register dilations and contractions by "sensing" that movement into the "basic" system. How simple Sherlock. Therefore when we observe a quasar, (observe means scan data), which "shows" a speed **vé** approaches **céé**, so we necessarily record the rotation of the quasar system to our system and thus to the quasar (from our point of view) time goes slower, like on that rocket. See

https://www.osel.cz/12963-kvasarove-hodiny-ukazuji-ze-v-mladem-vesmiru-bezel-cas-petkrat-pomaleji.html But that only "seems" to us in our system. In the quasar system there was no dilatation…; Even on the rocket, the aging of twin Peter did not occur more slowly, as Vavryčuk rightly said here (and as I defended the same thing 6-7 years ago against a bunch of disgusting spitters).

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In the macrocosm with size scales from 10^0 meters to 10^{26} m, the extra dimensions do not occur unwrapped, but in the microcosm on the Planck scales, the "large flat 3+3 dimensions" together with the extra dimensions are packed into balls || up to 9 length dimensions and 7 time dimensions ||, see srt.14 http://www.hypothesis-of-universe.com/docs/ea/ea_006.pdf for baryon Ωtt++ of three quarks TTT and then we call them extra dimensions beyond the number of 3+3D. http://www.hypothesis-of-universe.com/docs/aa/aa_166.pdf

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http://www.hypothesis-of-universe.com/docs/aa/aa_215.pdf →

University of Pittsburgh mathematician George Sparling

https://www.mathematics.pitt.edu/people/faculty ; In his recent study, sparling@pitt.edu examines a fundamental question that has been pondered since the time of Pythagoras and that still worries scientists today: what is the nature of space and time? After analyzing various perspectives, Sparling offers in 2007 alternative idea: space-time may have || six dimensions, the other two being temporal. I have been offering for 40 years the idea that space-time can have 3+3 dimensions, i.e. three longitudinal and three temporal. **Why not??** Sparling's paper, which was published in the Proceedings of the Royal Society A in 2007, lays the foundations of his theory. Basics *theory* ?? .., where are ?? Explains how spatial dimensions contain positive signs (eg Pythagorean 3D space is expressed as the sum of squares of intervals in the three x, y and z directions). It's nothing so strange and revelatory and even "like a theory" !?!? Minkowski's time dimension on the other hand combines these three spatial dimensions with the square of the time shift, That's not enough, it's almost just "like" crappy footnote… which contains an overall negative sign. "In three dimensions, the formula is $\mathbf{s^2 = x^2 + y^2 + z^2}$ explained Sparling ahem, ahem to PhysOrg.com. "Our standard spacetime has four dimensions", dimensions or dimensions ? what is the ***verbal*** difference and what is the ***physical*** difference ??? but the formula (formula or equation ?) has a critical minus sign: $\mathbf{s^2 = x^2 + y^2 + z^2 - t^2}$. This idea was invented by the Lithuanian Hermann Minkowski, which was published just six weeks before his death. I came up with another idea → (*=*) ; $\mathbf{s^2 = x^2 + y^2 + z^2 - t_1^2 - t_2^2 - t_3^2}$

[Sir Navrátil] How do these ideas "threaten reality" ????? Why isn't mine being examined ?

[Sir R. Penrose] for example says that the **special theory of relativity** was not a finished theory until Minkowski's famous paper Raum und Zeit ['Space and Time']. Until now, Sparling explains, most theories regarding extra dimensions have dealt with spatial rather than temporal dimensions, up to 2007 but also up to today until 2022, which leads to "hyperbolic"

rather than " ultrahyperbolic" geometry. Such reasoning will probably be a flawed logic of the "human brain"...I'm not a mathematician, but here I feel that a scientist-mathematician thinks that in such a 3+3D equation.

[Sir Navrátil] were "time dimensions geometric dimensions", is that right? Why cannot consider a system http://www.hypothesis-of-universe.com/docs/c/c_012.jpg 3+3D as **"+x = +t_1"** ; (*=*) ; **"+y = +t_2"** ; **"+z = +t_3"** on the same axis, on the same "double-dimension" ? How would this affect the Minkowski equation? and how OTR? and how "Lorentz transformations" ? . **Sparling** notes, however, that there are no a priori arguments for hyperbolic geometry but neither "against" and explores the possibility of a "spinorial" theory of physics where six 3+3 dimensions of space-time arise naturally . "In ***general*** dimensions

x, y, z, t_1, t_2, t_3

we say that spacetime is hyperbolic if there is only one minus sign in the formula for $\mathbf{s^2}$,"the said".**?** "So for example in the ten dimensions of superstring theory there are nine spatial dimensions with a plus sign and one minus sign. Why ?...why do physicists still think about only one dimension of time ? and n-dimensions of length ??? Only in this situation is there a clear difference between the future and the past. "And reason ? After all, the universe "ages = expands" in all directions **into three time dimensions** just as it "expands = expands" into three length dimensions. http://www.hypothesis-of-universe.com/docs/c/c_239 .jpg Cartan's symbol of triality connects two twistor space and spacetime.

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Obrazový kredit: **Erin Sparling**

"In my case, I'm led to conclude that ordinary four-dimensional space-time naturally extends into six dimensions: four-dimensional space is hyperbolic as usual, but in the surrounding space there are equal numbers (each 3) of space and time dimensions, so the formula for s^2 reads something like $\mathbf{s^2 = x^2 + y^2 + z^2 - t_1^2 - t_2^2 - t_3^2}$, where u and v represent new time variables. Even time dimensions. I call this structure a (3, 3)-structure (mathematicians call it ultrahyperbolic)." **Amazing**…I haven't met a physicist in 20 years who doesn't care about the multi-dimensionality of time actively interested as **Sparling** ; http://www.hypothesis-of-universe.com/docs/c/c_012.jpg

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On the multidimensionality of time:

http://www.hypothesis-of-universe.com/docs/eng/eng_037.pdf ;
http://www.hypothesis-of-universe.com/docs/aa/aa_143.pdf ;
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