https://www.youtube.com/watch?v=JaviQhKcfbg

4:54 / 5:06

Is time zero-dimensional?

my opinion on the multidimensionality of time will be here in red font below. I think it is a very important and neglected topic in physics.

Grain of Salt

5 subscribers **56 views 8 days ago**

If there are multiple dimensions of space, are there also multiple dimensions of time?
_____ …

0 komentářů

Přepis

(01)- If there are multiple dimensions of space, are there also multiple dimensions of time? The mathematics behind String theory shows that there must be more than the 3 dimensions of space familiar to us. Left - right; back - forth; up - down. So, if there are multiple dimensions of time, the analogy to that in terms of time would be that there might be multiple dimensions of time as well. The equations require other dimensions of space to exist in order to avoid illogical inconsistencies. The fabric of spacetime seems to be creating our reality. And we know that there are multiple dimensions of space right. So, the third dimension is what we're experiencing. We don't completely understand the second dimension but we can imagine it. An analogy to the second dimension would be video games - like Super Mario. It's just up-down, left and right. There's no depth. But then when we get to one dimension, stuff gets a bit confusing. An object's location would be found anywhere within a line of space. This line only has length. Because there's just back and forth, the line doesn't have any depth or height - it's just a line created by many zero-dimensional dots. The so-called zeroth dimension contains a singular point with no size or dimension.So, how much of that would be relevant in terms of time dimensions? We are not aware, we have not proved any multiple time dimensions but since there might be other dimensions of space, scientists have gone a step further and also explored the idea of there being multiple dimensions of time. The math seems to be more consistent here. Let's use one dimension of space to try to imagine what one temporal dimension would be like. We are three-dimensional beings, meaning that we have control over the three dimensions of space. We

can move through them in both directions and even stop for a moment. We do not have control over time, it only flows forward and we cannot stop or reverse it. Every moment of our life is just a 3D frame flowing in time like a 2D frame on a photographic film. What if time is zero-dimensional to us? Is the zeroth dimension of space represented by a singular point similar to the singular moment in time we are constantly in? This singular point in space might be equivalent to one of the 3D frames making up our lifetime. Would jumping from one dimension of time to two dimensions of time mean that in one dimension of time you are late for a meeting, and in another one you are early? Many questions like these remain without an answer and continue to perplex scientists. It is not clear if there is a second or third dimension of time but scientists seem to think it's a theory worth investigating. Disclaimer: the remaining part of the video is pure speculation so take it with a grain of salt! It won't completely make sense scientifically but it's just an idea that I had to explain different dimensions of space and time to myself in order to grasp the fabric of reality that we are experiencing. Let's imagine that time is constantly splitting into two, creating multiple dimensions of time. For example, when you open the box that Schrodinger's cat is in, two dimensions of time are created - one in which the cat dies, and another one in which the cat remains alive. So for simplicity, we will only take these two splittings of time into consideration, without considering the further splittings each of these two dimensions of time might experience, like a growing tree branching into different timelines. So, in one of the time dimensions, you open the box and see that the cat has died. If you want to "move" back into the dimension where the cat did not die, would the shifting across adjacent frames of time be like moving right to left in the dimensions of space? Is this a possibility of what 2-dimensional time could be? If so, what would 3-dimensional time look like? One of the temporal dimensions that is more complicated than what we are experiencing but less complicated than crossing timelines as in the previous example would be going back in time. Time travel would complete the second arrow that is normally part of the two-directional line, representing a dimension, as time for us only moves in one direction. Compared to time travel, our experience of time really feels like a singular snap of time, just like the singular point in the zeroth dimension. One dimension of time could be our lifetime seen as a whole from the moment of our birth to the time of our death, while similarly, one dimension of space is a line connecting dot A to dot B.

……

(**01)-** If there are multiple dimensions of space, are there also multiple dimensions of time? The math behind string theory shows that there must be more than the 3 known dimensions of space. Left - right; there - back; up down. So if there are multiple dimensions of time, the analogy to that in terms of time would be that there could also be multiple dimensions of time. The equations require the existence of other dimensions of space to avoid illogical inconsistencies. The structure of spacetime appears to create our reality. And we know that there are several dimensions of the universe. The universe has no dimensions, but space-time does. The universe is a more voluminous whole than the "component" of space-time.

UNIVERSE = quantity **Length** (it has 3 dimensions) + quantity **Time** (it has 3 dimensions) + quantity **derived-matter** + physical **field** + interaction + **laws-rules**. …+**God.**

So the third **length** dimension is what we experience. We don't fully understand the second dimension, but we can imagine it. An analogy to the second dimension would be video games

- like Super Mario. It's just up and down, left and right. There is no depth. But when we get into one dimension, things get a little confusing. The location of the object could be found anywhere within the space. This line has length only. Since it can only go back and forth there, the line has no depth or height - it's just a line formed by many zero points. The so-called zero dimension contains a singular point with no size or dimension. So how much of this would be relevant in terms of time dimensions? We are not aware, we have not demonstrated any multiple time dimensions,

This is more or less a lie, because you have never looked for multidimensional time (he who does not seek cannot find). Finally understand that TIME is an artifact, it is a quantity, it is a phenomenon of Being(!)...which is a Stoic reality. Only when time starts to run", then it is your familiar time that you speculate, perceive, "care", talk about. Only on that stoic dimension of time do objects begin to run = move, move along the dimension, only then is it a matter of "the flow-flow of time", because the object cuts into the dimension (time) intervals and... and that is "yours", your perception of time. You say here that the three-dimensional space x**,y,z**, you understand better, i.e. the shift "up-down"; "backward-forward", "left-right". But the same is true with time... but you don't perceive it because the human brain is developmentally adapted to observe "units" of lengths and time differently; it's 8 orders of magnitude different, it's $\mathbf{c = 10^8 / 10^0}$, you don't perceive a **change in flow** of time flow to the "t_1 axis" from the change of time flow to "t_2 axis and "t_3 axis". We perceive only the same rate of flow of time $\mathbf{t_1 = t_2 = t_3}$ = one interval per second. Time seems omnidirectional to us, i.e. its flow is the same in all directions. We do not perceive increments of tempo changes $t_1 + \Delta_1 = t_2 + \Delta_2 = t_3 + \Delta_3$. Usually it is like this $\Delta_1 \neq \Delta_2 = \Delta_3$, see a rocket that flies from the Earth and it flies in the "**x**" axis where **v → c**, ...in the "**y**" axis is v = 0 ; in the "**z**" axis, v= 0, so it dilates time only in the "x" axis, not in the "y", "z" axis. In the "x" axis is v → c, ...in the "y" axis is v = 0 ; in the "z" axis, v= 0. We do not perceive the increments $\Delta_1 \neq \Delta_2 = \Delta_3$ at all, we are **8 orders of magnitude less sensitive** to them than to the perception of length increments. Consider that the Universe expands into 3D spaces *similarly* as time (since the Big Bang), at the same rate $\mathbf{x_1 = y_2 = z_3}$ (10^8 intervals per second), which we also do not perceive at all, because everything around us is moving at the same rate to all three longitudinal axes. But we already perceive increments, we here on Earth are more sensitive to increments of length intervals up to three dimensions. Around us, we see that the car **travels to the x-axis** 10^8 + 123.2 intervals, and we perceive this by comparing it to our "stationary" surroundings - the houses do not move, the grandstand does not move, the forest does not move, the road does not move and the smoke from the chimneys it only moves a little. People perceive only those additions, but they do not perceive the "cosmological movement" of the Earth between the galaxies at 150,000 km/sec (to the "x-axis" = 100000000.0m +123.2m/sec" and to the "y-axis" = 100000000.0+0,01m/sec" ; to "z-axis" = 100000000.0+0.0m/sec").

Over time, it's a slightly different perception, the sensitivity is shifted by **8 orders** of magnitude here. **We only perceive the "cosmological** flow-flow of **time** → $\mathbf{t_1 + \Delta 0 = t_2 + \Delta 0 = t_3 + \Delta 0}$", but we hardly perceive the "delta" additions. In **space x, y, z**, on the other hand, **we do not perceive our cosmological shift through the universe, along the length dimensions**, $\mathbf{x_1 + \Delta x_1 = y_2 + \Delta y_2 = z_3 + \Delta z_3}$ and we only perceive the mutual additions in the x,y,z axes. (as a car and a leopard move, etc.) If we - the Earth - moved through space at the same speed as light c = 1/1, then we would perceive the same rate of time passing, identical to

the rate of unfolding-expansion of space. But we, the Earth, are "moved" on the spatio-temporal space stage - surprisingly to the position **$10^8/10^0$ = v < c = 1/1, i.e. 0/1 = 1/∞ = v.**

http://www.hypothesis-of-universe.com/docs/c/c_027.jpg

Description of another interpretation from my other source:

The Universe doesn't have the problems, but the human-physicists with an understanding of "why" there should be extra extra dimensions of time do. 3+1D space-time is enough for people..., but until they understand the idea of HDV, i.e. that we need additional dimensions to understand the "genesis of matter", not "from strings from Nothing", but precisely 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 .

3+1 D space-time is still enough for physicists today, because they are still captive to the idea of "scalar omnidirectional time". Why ? Because here on Earth we do not 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. e.g. **one hour →**

t_1 = 3600.000000**32** seconds ; t_2 = 3600.000000**30** sec. ; t_3 = 3600.000000**30** 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 = 3600.000000**36** seconds ; t_2 = 3600.000000**30** sec. ; t_3 = 3600.000000**30** sec.

Therefore the "scalar" "t" is enough for us. The globe is "placed in space-time so skillfully" that **t e m p o** of the passage of time is in all three components - the dimensions are almost the same, i.e. 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.** Overwritten in the components 3+3 of the dimensional grid, the measurement of the size of the dimensions will be written → **x** = 250,000m; **y** = 0 m ; **z** = 0m

(but beware, the globe is round, so it will be more precisely

x = 250000.0m; **y** = 0.00000002m; **z** = 0.00000003m..., we practically neglect these small values for **y** and **z**); dtto with time **t_1 ; t_2 ; t_3** ; after measurement are: t_1 = 3600.000000**36** seconds; t_2 = 3600.000000**30** sec. ; t_3 = 3600.000000**30** sec. (I made up the number **36** or **30** for interpretation) . That is, in the **x, y, z, t_1, t_2, t_3** (system 3+3D) coordinate system, we

measure changes only in the **x** and t_1 axes. If the ferrari transformed 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 elsewhere there are also - ... then according to STR, time would dilate on the rocket, of course !!!! it would dilate in the 3+3D **system 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's why we sense that STR dilation here on Earth as "dilation", but there is no dilation on the rocket, there is still **$t = t_1 = t_2 = t_3$**

**********.

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

Ad02) Time is an unexplored thing. On the one hand, I think that the "introduction" (I don't like the word) of three components of time into mathematical metrics will not spoil anything, it will not make anything worse in the equations. And on the one hand, there is also the possibility to investigate how time participates in the construction of matter http://www.hypothesis-of-universe.com/index.php?nav=e and whether it really is. It is sad that no one cares about the multidimensional question of time. This is evidenced by this article (in English posted to the international science network) where 56 readers visited it in 12 days. Poverty. Another article about multiverses (which is more stupid than multidimensional time) gets 1,200,000 readers per year, which is 1000 times more. Even a Czech article about the condemnation of the existing cosmology, about the erroneous Friedman in the Czech environment, delivered in Czech, will be visited by 10,000 readers in 14 days, 200 times more than the article about whether time has dimensions. but since there may be other dimensions of space, scientists went a step further and also explored the ha-ha-ha idea of multiple dimensions of time. The math seems to be more consistent here. Let's use one dimension of space to imagine what one dimension of time would look like. We are three-dimensional beings, which means we have control over three dimensions of space. We can move them in both directions and even stop for a while. We have no control over time, it only flows forward and we cannot stop or reverse it.

But that's not true. We are not in control of the three dimensions of space from a cosmological point of view, that is, from the point of view of the universe-space expansion. We can only "control" those "delta-increments" on the length dimensions. But then it is the same as with Time, with the only difference that **we perceive length increments by 8 orders of magnitude more sensitively** than time increments. **$c = 10^8/10^0$**. We do not perceive an interval of 0.00000002 seconds on the "x" axis...etc. Every moment of our life is just a 3D picture of objects, objects !! a picture in which we are aware of the "change of position" in meters, (not the change in the middle of the universe, at a distance of 13.8 billion years), the change since the big bang, i.e. more sensitively than the change of time in one axis more and in the other less… flowing through time like a 2D frame on photographic film. Precisely because we perceive **$t = t_1 = t_2 = t_3$** without those additions of pace, we believe that time is omnidirectional with one identical pace. But Vavryčuk is already showing us that he too thinks that the pace of the passage of time was different in the ancient past. https://www.youtube.com/watch?v=wyvGaFeAudw&t=2601s What if time is zero for us? Is

the zero dimension of space represented by a singular point similar to the singular moment in time in which we constantly find ourselves? Speculation. This singular point in space can be equivalent to one of the 3D images that make up our life. Would jumping from one time dimension to two time dimensions mean that you are late for a meeting in one time dimension and early in the other? It shows how man, even scientist, misunderstands Time. (some - hopping- “from time to tim) Many questions like these remain unanswered and continue to baffle scientists.

Because scientists don't care about such questions. He already knows that gravity bends time, which means that the tempo of the passage of time changes, in "interaction" with matter-matter, time intervals change in relation to some time standard. Time also changes according to STR in rectilinear movement when v → c but even that is an illusion, because the scientist did calculate that dilation occurs in the movement axis (again the change in tempo - the size of the interval against the standard interval) but the scientist did not investigate that...that the reason is the rotation of systems in STR, i.e. again the "curving" of dimensions (length and time). **It is not clear whether there is a second or third dimension of time**, it is not, because scientists have not investigated it. They will rather investigate tachyons, entanglements, and parallel universes, but they will not investigate time... "fundamentally", and mainly because Navrátil has been writing about those time dimensions for 20 years, and that is demented. but scientists seem to think it's a theory worth exploring. Ha-ha-ha No, scientists don't think so, just an enthusiast like the author of this article. Warning: The rest of the video is pure speculation, so take it with a grain of salt! And what is not speculation? What has been verified 1000 times. But when time and its dimensions are also verified 1000 times, it will no longer be speculation either. Speculation today only because no one examines it. This won't make complete sense scientifically, but it's just an idea I had to explain the different dimensions of space and time in order to understand the structure of the reality we experience. Let's imagine that time is constantly splitting into two about two times, the author means… and creates multiple dimensions of time. For example, when you open a box containing Schrodinger's cat, two dimensions of time are created - one in which the cat dies and another in which the cat remains alive. (yes, yes...the dimension is not "created" by opening the box. The author together with the other Kulhánkovic-like students still haven't read my opinions, and a parable like that **""""time doesn't run for us, but we run for it""""**, that time >is not equal to dimension<, because the flow-flow of time >is only and only the movement of an object along the time dimension<, whereby the object cuts off time intervals, and we humans perceive this sequence of cut-off time intervals as the flow of time.).

So for simplicity we will consider only these two divisions of time, **(this is the idea of dividing the big-bang into two big-bands …, no, no, no)** without considering the other divisions that each of these she could experience the *two dimensions of time* like a growing tree branching into different timelines. So in one of the time dimensions you open the box and see that the cat has died. If you want to "shift" back to a dimension where the cat didn't die, would scrolling through adjacent time frames be like moving from right to left in space dimensions? Ah…, the author may be suggesting a different consideration here. That is, not "tearing time" into ***two times***, i.e. *into two dimensions=time*, but...but if his reasoning led to "my" 3+3D universe with three time dimensions, a distant Observer could observe a rotated system of a box with a cat, and therefore the time intervals of the "cat" on the t_1 dimension are diametrically different from those on the t_2 and t_3 dimensions, and thus perceive the cat's lifetime in the t_1 axis as alive, and in the t_2 and t_3 axes as zero, zero or very small intervals. Is

this a possibility of what 2-dimensional time could be? If so, what would 3D time look like? Normally

http://www.hypothesis-of-universe.com/docs/c/c_012.jpg ; http://www.hypothesis-of-universe.com/docs/c/c_036.jpg ; http://www.hypothesis-of-universe.com/docs/c/c_435.jpg ; http://www.hypothesis-of-universe.com/docs/c/c_429.jpg One dimension of time that is more complicated than what we experience, but less complicated than crossing timelines as in the previous example, is going back in time. This is faulty speculation. In the global non-linear macro world >space-time expands,< there the object = cursor in the field, it cannot run in the opposite-back dimension. But in the microworld, where the foam is a dimension - a boiling vacuum, time runs "right - left" normally, physicists themselves say that even the flow-flow interactions of time have no meaning. In the micro-world of Planckian scales, time dimensions are routinely packed, packed, tangled in balls, and the observability of the "opposite arrow of the flow of time" is in the realm of 10^{-42} sec. This is unobservable. Let me remind you: the proton is 99.98% empty (still slightly curved 3+3D) space, and the curved space starts to show itself strongly only somewhere in the corner of the proton, 0.02% of the proton's volume, where it only starts to "twist" http:// www.hypothesis-of-universe.com/docs/c/c_411.jpg to foam even time, time dimensions, even length dimensions, with those quarks... http://www.hypothesis-of-universe.com/docs/c/c_425.jpg ; http://www.hypothesis-of-universe.com/docs/c/c_418.jpg up to the Planck scale of sizes, the dimension of time is packaged...so time "flows" here also in the opposite direction...do you understand?

Cestování časem v makrosvětě měřítek ne, by dokončilo druhou šipku, která je normálně součástí dvousměrné čáry, která představuje dimenzi, protože čas se pro nás pohybuje pouze jedním směrem. Ve srovnání s cestováním v čase se naše zkušenost s časem skutečně cítí jako jedinečný okamžik, stejně jako singulární bod v nulté dimenzi. Jednou dimenzí času by mohl být náš život viděný jako celek od okamžiku našeho narození do okamžiku naší smrti, zatímco podobně je jednou dimenzí prostoru čára spojující bod A s bodem B.

…….

(02)- So, we used 3D space to imagine the dimensions of time: up and down in space would be equivalent to going up and down in our current timeline, in other words, going back or forward in time. Left and right would be switching from one timeline across to an adjacent one, closely related or maybe not to our current one. But how does the depth of space translate into the dimensions of time? Would this be crossing from our current timeline across to a completely foreign to us timeline we were never part of?

……….

(02)- So we used 3D space to imagine the dimensions of time: up and down in space would be equivalent to moving up and down in our current timeline, in other words going back or forward in time. Left and right would switch from one timeline across to an adjacent, closely related, or perhaps unrelated to our current one. But how does the depth of space translate into the dimensions of time? well, by studying HDV as well http://www.hypothesis-of-universe.com/index.php?nav=aa Would it be a transition from our current timeline to a completely alien timeline we've never been a part of?

…… JN,
12,11,2022 , translated into English by a translator on 28/02/2023