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Prof. Brian Greene:

A Universe of at Least 10 Dimensions

String Theory Finally Reconciles Theories of Relativity and Gravity

BY VIRGIL RENZULLI

Physicists have spent much of the 20th century + 20 years from the 21st century, ie together they spent about 60 years "suffering" from strings that are not very curved or very curved and even twisted, which after the Bang appeared "from Nothing", how to model elements of matter from them, twisting " parameters "for all elementary particles and they have no idea for 60 years how to build a complex mass from those strings" from Nothing ". Why can't they? - And I think it will never work? … Because they did not read HDV answering three major questions and redefining space and time in ways that contradict human intuition. OK, then, dear stringers, finally finish it .. (60 years… thousands of studied physicists with high salaries, in equipped laboratories with sophisticated mutual communication, with publications… and still the result: nothing. I work for free out of enthusiasm and reflecting ridicule, humiliation, insults and persecution. And I have more than you, I have a compact, comprehensive, meaningful vision for HDV with many new ideas.)

The three questions, all of which deal with the nature of the universe, are:

- Why can't you run away from a light beam and diminish its approach speed? Since the non-curved universe is c = 1/1, ($c^3 = 1^3/1^3$) in this lattice of flat space-time, all states of curved dimensions, whether field or matter, simply **float**, the ratios "x" to "t" are the ratios of curved dimensions… or v <c… .$\mathbf{m_0 . c = m . v}$…; everything that has a lower velocity véé than céé, it "distorts the dimensions" or "materializes-acquires a non-zero mass", it is simply the ratio of other curvatures of longitudinal to temporal curvatures
- If the sun were to explode, would you feel the gravitational impact on the Earth's orbit before you saw the explosion eight minutes later?
- Why are the two major theories in physics—one dealing with stars and galaxies, the other with atoms and subatomic particles, because we are in space-time with a range of 10^{42} orders http://www.hypothesis-of-universe.com/docs/c/c_017.jpg and we are somehow almost in the middle (and if we chose a slightly different unit-intervals, we would probably be quite right in the middle of that scale… (?)!…

String theory **requires** at least six extra spatial dimensions And what does the Universe **require**? have you already found out? ? Does he demand it of you? tightly curled-up to microscopic size. Well .. you're halfway to my HDV. The universe requires not only "twisted" length dimensions (into a ball-geon, a wave package), but also "twisted" time dimensions. The basic grid-mesh-yarn of untwisted flat dimensions contains 3 + 3D. And in this "flat" lattice of space-time, then all other crooked states of extra-dimensions float… both fields and wrapped twisted formations (and these, according to my HDV, are needed for all matter, ie 25 elementary particles - leptons, quarks, bosons… hence baryons, mesons) 9 longitudinal dimensions and 8 temporal dimensions, see example of the construction of all particles, is in this table http://www.hypothesis-of-universe.com/docs/ea/ea_006.pdf ; resp. http://www.hypothesis-of-universe.com/index.php?nav=ea (there the second version from 2004). Although I don't know if they exist practically in space at all, such pieces as baryon $\Omega_{\tau\tau}^{++}$ composed of TTT quarks, which has the highest number of space-time dimensions. Of course, when building a more complex mass from many quarks and leptons, ie atoms and further molecules…, the multiplication of those extra dimensions will appear much-much more, see the example http://www.hypothesis-of-universe.com/docs/eb/eb_002.pdf Here we see two such dimensions, curled-up into tiny spheres.

why? both proved time and time again—mutually incompatible?

The answers to these questions have not been easy for physicists to find or for lay people to comprehend. Albert Einstein demonstrated that time slows at great *speeds* * say "pace" because the word "speed" is used in physics for something else. * and that space is warped. O.K. So ask yourself what the location of space-time (3 + 3D) will look like, which will "curl = become tangled = packed" into itself and what will happen to it, resp. from her! The current "master theory" of particle physics **holds** that all matter is composed of tiny vibrating strings,* But this theory knows nothing "of what these strings are" (invents a fairy tale, invents something that does not exist in reality) and… and only when this theory uses the dimensions "Time" and "Length" instead of strings, then it only makes sense and ratio. And this is already HDV. http://www.hypothesis-of-universe.com/index.php?nav=ea which is easier to accept than the theory's requirement that there need to be at least six more spatial dimensions in addition to time and the three spatial dimensions that we can perceive.* But why not examine the "theory" (alternative) that says that time also has dimensions ?? When a rocket flies at a speed approaching the céé, it dilates time only on the axis of motion-flight, dtto auto ferrari along the veledrome, dilates time in the "x" and "y" axes, but in the ypsilon axis the measurability of such dilation is 8 orders of magnitude more **difficult !!!!** and this is what physicists have not yet researched - not measured !!!, although they could test in Tokamak or in the CERN collider, particles fly there after the "crooked length dimension" but also after the "crooked time dimension"

The question of how there can be at least 10 dimensions and probably 11 dimensions when there only appear to be four was one * in that case, the question is equally valuable: why shouldn't space space 3 + 3 be dimensional? why nééé? in that case, the question is equally valuable: why shouldn't space space 3 + 3 be dimensional? why not ? …why not !!!! of the issues explored by Professor of Mathematics and Physics Brian Greene in a Graduate School of Arts and Sciences' Dean's Distinguished Lecture, * And what did he research? I compiled a table of all elementary particles. 9 + 8 space-time dimensions were enough for me. 3 + 3D dimensions are expanded, and other extra dimensions are "packed" into a ball… why do you think it is impossible ??? Strings "from Nothing" are possible ?????? Mathematically, the theory of "strings" has not suited them for 60 years…; I have an HDV where you can build not only atoms from time and length dimensions http://www.hypothesis-of-universe.com/docs/eb/eb_002.pdf "Space And Time Since Einstein," delivered Mar. 12 at the University Club. Greene, who is also writing a book on the subject, *The Elegant Universe,* to be published in January 1999 by W.W. Norton, described the three central conflicts that have driven physics in the 20th century. * The explanation is simple: there is a "unit" ratio for "c", c = 1x / 1t, ie the units of what "Universe chose them" for the flatness of space-time 3 + 3D. All other ratios "x" to "t" are ratios "Curved dimensions", therefore the ratios v < c.

The first conflict, which concerns motion and the speed of light, arose in the early 1900s. When an ordinary object such as a baseball or snowball is thrown at us, we can run away from it, causing the speed with which it approaches us to decrease. But if you try to run away from a beam of light, you cannot make it approach you any slower.

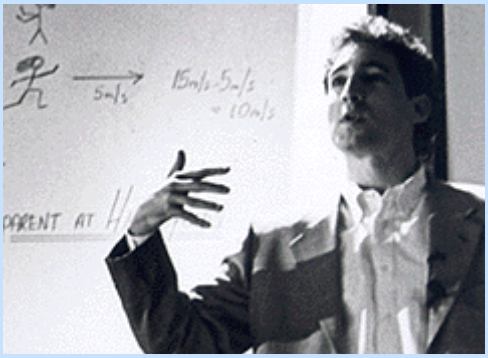
“Light will always approach you at 186,000 miles per second whether you run away from it, run toward it or stand still,” said Greene.* When the rocket approaches v in the approach of c, it rotates its own rocket system and when it reaches c, the system will be rotated by 90^0, so time also "bends into an arc"…; I don't know yet, but I suspect that from a body moving away from us at c-speed, that light flies "perpendicular to our observation projection" and… and along the way the trajectory of the photon rotates until the light falls "perpendicular to our observation" (around the Sun also the trajectory of light bends… that ??, so why wouldn't a photon fly out of the quasar at the end of the Universe "parallel" to our observable and…, and as it moves along a curved space-time, it will bring the shifted "redshift" to the spectrum Yes or no? There is another question: is the universe "expanding (its curvature of dimensions) evenly"? Certainly even in "stop-time" we see a different curvature of space-time between galaxies than in the galaxy and than in the black hole…; what about scholars? “Einstein resolved the paradox by showing that our intuition regarding space and time was wrong, that our conception of motion—the distance something travels divided by the time it takes to get there—was incorrect.” * How about my intuition with HDV? How mature is it to madness? The team around Kulhánek sent me there for the opinions of "HDV" (some intuitions are on the medal, others intuitions on the cage with the net; and if there was a 15th century, I would be burned. But even Einstein did not realize that STR is proof of the rotation of the rocket system relative to the ground observer system)

Einstein’s Special Theory of Relativity explained that the speed of light is a constant and that at great speeds, time slows down (relatively speaking) * Not. Time does not slow down on the rocket, but we-humans-Observer here in the observatory receive information from the rocket that time dilates there. And the reason is the rotation of that time dimension - the earth's time interval lengthens on the rocket because global space-time is curved, because the dimension of time is also crooked, because "the rocket moves along the crooked time dimension" and we-observer scan the stretched interval into our " normal-selected "interval. I repeat: the rocket runs the same pace of time as on Earth, only we "observe" the dilatation (we get a rotated dimension with a rotated time interval, which appears to us from the equation "stretched".) and space becomes distorted. * Dtto is the effect with lengths = also the rotation of the length dimension is the "cause" of shortening the intervals, but in the opposite direction.
But in solving the paradox, Einstein came into conflict with another towering figure of physics, Isaac Newton and his Theory of Gravity, which holds that the gravitational force is transmitted instantaneously—or faster than the speed of light. Gravity is not a force, it is a nonlinear equation (a parabola for the time dimension) and when a "point" progresses over a parabola the curvature changes unevenly.

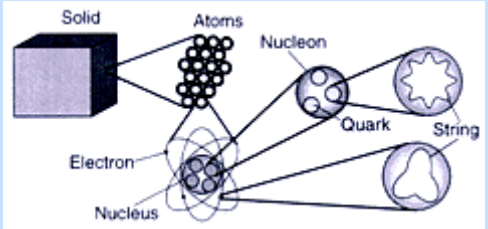
“If the sun were to explode,” said Greene, “we would not know about it visually for eight minutes because it would take eight minutes for light from the explosion to reach us from the sun. * I do not know exactly how to explain or describe it, so I will say this unprofessionally: The "curvature of the time dimension" from the Sun to the Earth changes at a "pace" such that light flies over it for 8 minutes. If the curvature of time from the Sun to the Earth were different, the light would fly, for example, for 9 minutes… According to Newton, however, the gravitational disturbance would immediately cause our orbit to abruptly change. So, the influence of gravity, in Newton’s Theory, is transmitted much faster than light. Einstein knew that nothing

could exceed the light speed, and for the next decade he struggled to resolve this conflict.

"His answer is the General Theory of Relativity, * That is, a gradual change in the curvature of the time dimension ((the curvature of the time dimension is different on the GPS satellite than at sea level)); it's even measurable, isn't it? by which he showed us how gravity is transmitted through the warping of space, * In other words: the state of a certain local curvature of space-time 3 + 3D (to the star, away from it, the curvature of "other local dimensions") "floats" in the global almost flat 3 + 3 dimensional space-time; in other words: *spacetime 3 + 3 more crooked "floats" in less curved 3 + 3D spacetime.* The basic flat s-t is basically just a "mathematical abstraction", where such a non-curved 3 + 3d does not exist in "our post-bang Universe." Our universe is crooked everywhere, ie thousands and millions of local "volumes" of 3 + 3d curves float in less curved states of space-time - galaxies "more curvy" "float" in less curved states 3 + 3 spacetime. ((*what, for example, do you think that the lines of force around the magnet are ??? of which they are ???, they are not of matter, they are not "of nothing", they are of curved space-time, which floats in the basic 3 + 3 grid of space-time*))) and if you look closely at how the space **warps travel**, much like ripples in a pond, * ha !!, aha, and what are the "outlines" ?? mathematical abstract of real space-time from 3 length and 3 time dimensions you find they travel at light speed. And so, gravity is transmitted at exactly the same speed as light.



WHAT MATTER IS MADE OF—As explained by Brian Greene, above, all matter consists of atoms * Ha-ha.Brian explained "what matter consists of", but did not explain "what it is made of = built" which are themselves composed of electrons swarming around a central nucleus.* The electrons are the "package = a ball of tangled dimensions" s-t. String theory adds a new ultramicroscopic layer by declaring ? that subatomic particles actually consist of tiny loops of vibrating energy, "strings." * And this is the whole problem of the "standard world of physics" that string theory claims = it declares that those strings originated "from Nothing" and "produces matter" by its vibration. I argue otherwise that matter is produced from the dimensions of "spatio-temporal quantities", ie from the dimensions of time and lengths - by curving the packing of these dimensions into balls. The stringers make matter from strings, I from the dimensions of space-time; They paid for it medal in Stockholm and I for it went crazy. (where Czech physicists tried to get me)



"In actuality, then, if the sun were to explode, we would not know about it immediately by an abrupt change in our orbital motion. Instead, exactly when we saw the explosion, we would feel it."

Einstein's General Theory of Relativity, which is applicable to things very big—gravity, stars, galaxies—became one of the two pillars upon which 20th century physics is based. The second pillar is Quantum Mechanics, which describes the microscopic structure of the world—atoms and subatomic particles.

"Each of these pillars has been tested for accuracy," said Greene. "Each comes through with flying colors, and yet, the two theories are mutually incompatible. * They are not compatible mathematically (nonlinear gravity cannot be combined with linear quantum mechanics), but they can be connected via the **"principle of alternating symmetries with asymmetries"** http://www.hypothesis-of-universe.com/docs/g/g_073.pdf because without it, there would be no genesis, and therefore not our shaking Universe. And that has been the driving conflict in physics for the last half century. * HDV will also be "driving" one day, but I had no idea it would take 40 years for physicists to notice it at all… (and possibly give arguments + reasons to throw HDV into the dustbin of science. But neither did it, nor did they have to physicists courage)

"The heart of Quantum Mechanics is summarized by (Werner) Heisenberg's Uncertainty Principal and that tells us that there are certain features of the microscopic world that we cannot know with total precision. It's not a limit of technology; there are just some complimentary things we can't know simultaneously. * Heisenberg is something like → ∞ . 0 = 1 . 1

"For example, Heisenberg showed us that when you look at smaller and smaller regions of space, the amount of energy embodied in that space is known with less and less precision. I look like this →

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http://www.hypothesis-of-universe.com/docs/b/b_121.pdf
There is a tremendous **amount of roiling**, hot, kinetic energy bound up in every little morsel of space and the smaller the morsel the more the energy.

"If you've got a lot of energy in tiny distances, it means that space is incredibly frothy and wildly undulating, * Well, finally, here to see physicists approaching HDV. Every crooked state 3 + 3D is matter-energy and these undulations are so violent that they completely destroy Einstein's Geometrical Model of Space, * It does not destroy, but in the chaotic "foam of curved dimensions" at the beginning of the universe, ie in the plasma "bundles-balls" of those coiled dimensions are born, which then have the form and character of elementary particles, where each package topology means "properties" of particles (spin, weight, charge, etc., etc.). And in that plasma the "surrounding space-time" expands, ... but "packets-particles" never expand again…, they can only conglomerate and bind… the central principle of General Relativity. On large scales, i.e. the almost unpacked s-t such as that of galaxies and beyond, * i.e. the almost unpacked s-t these microscopic kinetic undulations average out to zero; * in the plasma the curvatures are "averaged" and therefore it is a foam - mathematical equality, linear state… vacuum foam is linear like quantum mechanics. we don't see them. Only when we focus on microscopic distances, do we become aware of the tumult that is going on and realize that it is so severe that Einstein's theory falls apart."

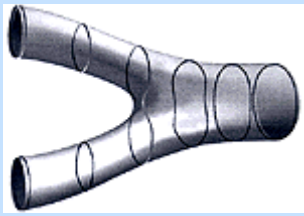
The conflict continued for half a century until the development of Super String Theory, which reconciles ha-ha-ha Quantum Mechanics with the General Theory of Relativity.

"If you examine microscopic particles the way people did in the early part of the century, you come to the conclusion that the elementary constituents of nature are little dots that have no further internal structures," explained Greene.* And that is a mistake. These elements are "wrapped dimensions" of space-time (explained by Navrátil in his HDV) "String Theory tells us that if you were to probe inside these dots with a precision not possible with our present technology, you would find each has a little variant A vibrating loop, * variant B: a package of tangled dimensions a vibrating filament of energy, inside of it. And the difference between one particle of matter and another, according to Super String Theory, is the pattern of vibration that the string is undergoing. * And here is the contradiction, here is the platform of two differences of opinion…, here is the statement of the stringers, **unproven** (cry for Nobel-price) and the statement of HDV meaningful, **unproven** (with cries of insult, spit and ridicule.) Two visions unproven, ie. equally low-quality, but one is haunted to the point of burning, and the other praised as the most perfect super-true vision. // and the professor never apologized for the humiliation of HDV… // Different particles can be compared to different notes that an ordinary vibrating violin string can play—electrons, photons, quarks.

“String **Theory** * ?? (a vision that is not proven is not a theory) also holds that there is a smallest possible distance in the world, the size of the string. And this distance is just large enough that the pernicious small scale quantum undulations predicted by Heisenberg’s Uncertainty Principle are avoided. Some people feel cheated with this explanation. What it means is that the problem we thought was there was not there at all.”

String Theory may also lead to a Unified Theory *.. just as "can" lead to a unified theory like HDV in which all the principles and theories of physics can be distilled into a single overarching statement. String Theory holds that absolutely everything is a manifestation of a single object—a string. ?? (perhaps the author wanted to say that each elementary particle is a "manifestation of one object" = strings) Yes, this is a "statement - a cry" of stringers and is no better than HDV, where it is claimed that elementary particles are packages of coiled dimensions of time and lengths… When it vibrates one way, it looks like an electron. When it vibrates another way, it looks like a photon. * This is a vision very, very close to HDV, and at the same time does not exclude the structure of matter from the dimensions s-t (or space-time). **All the particles and all the forces are part of a single unified concept.** It's interesting to hear all the thoughts go to my HDV concept

“Super String Theory has its own remaking of space-time,” !! said Greene. “It requires that it have more than three space dimensions.”



STRINGS IN ACTION—Two string loops interact by joining together into a third string.

If strings can only vibrate north and south, east and west, up and down, there are not enough variations to account for all the particles and forces. The equations of String Theory require at least six more spatial dimensions. Reality and the Universe (and observations) do not require it ?, just equations? My equations are also equations using "dimension characters". Everything I show http://www.hypothesis-of-universe.com/index.php?nav=eb are elegant equations using "x" and "t".

Greene used an example of a garden hose to explain why we don’t see these additional dimensions. * Greene has a **"hose from Nothing**", I have a packed-packed ball of real-facts from real space-time. What's up with burning HDV author? From a distance, the hose looks like a straight line, * from a distance the devil looks like an angel… and if an ant lived on the hose, it could move up and down its length. But if you move closer to the hose, you realize it has another dimension, its girth, and the ant could walk around the hose as well.

Dimensions, therefore, would come in two types: those that are long and visible and those that are tiny and curled up, existing only on the microscopic level of strings.

“String Theory has the capacity to describe not only how the universe is, but how it got to be the way it is,” said Greene. “It may give us an explanation of why there is space and why there is time.* String theory cannot explain to us "why" there is space and time. If she could, she would have already done so In the same way that cloth is made of thread woven together in a pattern, some theorists have suggested that strings themselves are the threads of space and time. Space and time themselves

may be the result of an enormous number of little vibrating strings * Here, the opposite logic to that offered by HDV is presented. Unnatural logic. Greene says here that the vibrating strings existed before space-time and that this is the result of the vibrations of the strings, and that is definitely nonsense, definitely wrong. all coalescing together and vibrating in a particular coherent pattern.

"If so, you can imagine a state of the universe when the strings have not coalesced in that manner, and space and time have not yet been formed. * Here is the confirmation of the wrong logic: until the strings are connected, there will not be space-time in the Universe - perhaps not even Maruška from 5A believes it. Well ... That's probably why HDV is diametrically different and doomed to insane asylum And it is possible that the universe could return to that state."

Could strings also coalesce into another kind of universe?

"In principle," said Greene, "it is possible." And I (from the cage with the net) say that "basically" is not possible.

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