

## A model of matter, mind, and consciousness

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**Abstract:** This article shows how string theory is able to model nonphysical particles and how three-dimensional string theory “branes” (parallel universes) could hold dark matter and dark energy. Introspective experience from scientifically oriented groups gives us some clues of how the mind and consciousness could be described. The resulting synthesis from science and direct introspection, for understanding mind and consciousness, are presented. It shows a cosmos with: (1) A parallel nonphysical universe containing dreams, thoughts, emotions, and memories. This universe, called the psychological universe, is probably based on dark matter; (2) A parallel nonphysical universe where intuitive nonphenomenal thinking takes place and where personality and worldview are stored. This universe is called the intuitive universe and is probably based on dark energy and seems to have quantum mechanical qualities. These two universes together make up the mind such as it is defined in this article; and (3) A third nonphysical universe filled with negative energy could make up consciousness. All four universes (including the physical universe) have different vacua, dimensions, and energy levels, so they are all around us but separated. I propose that biological beings consist of a physical body in the physical universe plus entangled bodies in the three non-physical universes. Entanglement is established by signals going both ways between the different bodies. String theory shows how the interaction between branes/universes can take place. Such a worldview seems to match the requirements from string theory so that it becomes a theory that includes the physical universe and the mind (all kinds of positive energy), and the connection to consciousness. Consciousness itself is based on negative energy, according to mathematician Luigi Fantappiè. The physical base for negative energy is still an open question. © 2020 Physics Essays Publication. [<http://dx.doi.org/10.4006/0836-1398-33.4.453>]

**Résumé:** Cet article expose comment la théorie des cordes est capable de modéliser des particules non physiques et comment les sones tridimensionnelles de la théorie des cordes (univers parallèles) pourraient contenir de la matière noire et de l'énergie noire. L'expérience introspective de groupes à orientation scientifique nous donne quelques indices sur la façon dont l'esprit et la conscience pourraient être décrits. La synthèse résultant de la science et de l'introspection directe, pour la compréhension de l'esprit et la conscience, est présentée. Elle présente un cosmos avec 1) Un univers parallèle non physique contenant des rêves, des pensées, des émotions et des souvenirs. Cet univers, appelé l'univers psychologique, est probablement basé sur la matière noire; 2) Un univers parallèle non physique où la pensée intuitive non phénoménale a lieu et où la personnalité et la vision du monde sont enregistrées. Cet univers, appelé univers intuitif, est probablement basé sur l'énergie noire et semble avoir des qualités de mécanique quantique. Ces deux univers constituent ensemble l'esprit, tel qu'il est défini dans cet article; 3) Un troisième univers non physique rempli d'énergie négative pourrait constituer la conscience. Les quatre univers (y compris l'univers physique) sont dotés de différents niveaux d'énergie, vides et dimensions; ils sont donc tous autour de nous mais séparés. Je propose que les êtres biologiques se composent d'un corps physique dans l'univers physique, ainsi que de corps enchevêtrés dans les trois univers non physiques. L'enchevêtrement est établi par des signaux bidirectionnels entre les différents corps. La théorie des cordes montre comment l'interaction entre les sons/univers peut se produire. Une telle vision du monde semble correspondre aux exigences de la théorie des cordes, de sorte qu'elle devient une théorie qui inclut l'univers physique et l'esprit (toutes les sortes d'énergie positive), et le lien avec la conscience. La conscience en elle-même est basée sur une énergie négative, selon le mathématicien Luigi Fantappiè. La base physique de l'énergie négative demeure une question ouverte.

Key words: String Theory; Dark Matter; Dark Energy; Nonphysical; Mind; Memory; Introspection; Consciousness.

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## I. INTRODUCTION

Where does consciousness originate? Should this question be answered by natural sciences, psychology, or religion? Does Cartesian dualism separate real-world phenomena from those who do not really exist and have no energy? Are paranormal phenomena such as spirits, angels, telepathy, and clairvoyance real? Could the introduction of nonphysical matter and universes explain these phenomena? If not, how to explain the science verifying telepathy and clairvoyance<sup>1</sup> and a large number of reports from observing angels and spirits?

Trying to do research on such nonphysical phenomena by scientific means is often called fringe science and has traditionally been ignored, or even ridiculed by some mainstream scientists.<sup>2</sup> Today's mainstream thinking in physics was mostly established late in 1800 as a materialistic view on cosmos and a desire to separate science from spiritual and "alternative" thinking after a professor of cosmology Johann Friedrich Zöllner dishonored the scientific establishment by supporting a "medium and magician" Henry Slade and arguing publicly for the fourth dimension. Attitudes among scientists are, however, slowly changing, and consciousness research has even become a mainstream interest—mostly within a traditional materialistic frame-of-understanding, or infused with religious thinking or eastern philosophy from merited persons, such as "The Science of Consciousness conference."<sup>3</sup> An increasing number of scientists are trying to influence the mainstream to accept alternatives to the established materialistic view. But, changing a worldview is difficult and rare. We may all look at ourselves to really understand how difficult it is to change our own view. The world-view seems to be part of our basic identity. It usually takes a personal crisis to bend it a little bit. To me, it is good to find writers that shoot intelligently in all directions like John Horgan.<sup>4</sup> The proposals of this article support both an extended materialism and panpsychism.

Many physicists are waiting for a revolution in physics since there are some very basic enigmas to be solved. What happened before the Big Bang? How will the universe end? What is dark matter? What is dark energy? How to explain quantum entanglement? What are mind and thought if anything real? Is consciousness a consequence of brain activity or an eternal part of the cosmos? What is really time, can it flow backward? The mainstream materialistic frame-of-understanding has failed to provide a theory of everything and answer such questions after a century of really hard efforts. "Cosmos" is in this article a name used for the sum of all universes. Cosmos could have existed before the Big Bang, and it may exist after the physical universe for some reason has vanished.

In this article, I assume that we have not discovered all kinds of energy, that energy might take the form of "nonphysical" particles so that mind, consciousness, and paranormal phenomena are based on energy and that biological beings are to some degree capable of sensing these forms of energy. Not by the normal senses, but if the mind is made of nonphysical matter, the mind might have the capacity to sense comparable forms of energy. Sensitive persons have

proposed different forms of energy in order to explain their experiences, but these have still not been supported by physical theories.<sup>5</sup> Nonphysical particles, as defined in this article, will not interact with physical matter through the electromagnetic and nuclear forces, but might interact through gravity. Human-scale items of such nonphysical matter can, therefore, penetrate walls and closed doors and they cannot be observed with naked eyes, felt by touch, or measured by known physical instruments.

If such different kinds of matter/energy exist and are organized into separate nonphysical universes that are all around us, we will even be able to explain what Einstein called "spooky action at a distance," that is: *If the universes have different dimensions from our physical universe.* Then the space of the nonphysical universes will have a distance that is not physical such as in the physical universe. If two physical particles are connected to (or entangled with) a common particle in a nonphysical universe, then a change of the nonphysical particle will be observed by the two entangled physical particles simultaneously wherever they are in the physical universe, because the signal has no physical distance to travel. Attachment/entanglement of the nonphysical particle into the physical universe can be several places at the same time.

Dark matter and dark energy might be particles of such nonphysical type. Their influence on the normal matter is measured only by gravity on a cosmic scale. Gravity is not involved in matter collision or electromagnetic observation. Gravity instruments are not sensitive enough to measure influence from human-scale objects. Gravity is the only known force that does not fit into the standard model of particle physics. It has some unique qualities. String theory, as explained below, has proposed what the differences are. If the nonphysical universes make up our mind and consciousness, then the phenomenon of entanglement between physical particles indicates that all kinds of matter could have primitive qualities comparable to mind, and two entangled physical particles may both have the same primitive "mind." In this case, entanglement is between a physical and a nonphysical object, not between two physical objects. But different physical objects may be entangled to the same nonphysical object. Cosmos as such might have a mind and be conscious on many levels, and biological beings might not be at the top of this ladder. But biological life must have some importance on a greater scale since it is established.

The main body of this article is used to support the cosmic model outlined above and specify it in more detail, by using published science and observations presented by organized groups that have a scientific attitude and approach to their observations.

## II. STRING THEORY

String theory is not a complete finished theory but a proposal that has some unfinished parts. It is generally accepted as the best contender for a theory of everything. General information about string theory is gathered from books<sup>6–10</sup> and the official string theory website.<sup>11</sup>

String theory contains mathematical modeling (description with mathematical equations) of the tiniest matter particles and the forces acting between them. Also, the room (universe) these particles can exist in and how the forces can act between different rooms is defined in the string theory. Such a room is called a brane. In other words: String theory opens up for the scientific existence of parallel universes. But until now the string scientists have assumed that all parallel universes use the same space/vacuum—all have the same three spatial dimensions. If, however, the parallel universes have different vacua, laws of physics, and different dimensions (they are different string theory branes) such as explained in the introduction of this article, the total cosmos will look very different and have very different characteristics. The consequences of such an assumption are discussed below.

String theory assumes that elementary particles and forces are made up of strings. All strings are equal, but they can vibrate in different ways. Each set of vibrations makes up a specific matter particle or a specific force that can act on certain kinds of particles. Strings can be open like a violin string or closed as a necklace. Each end of open strings must be connected to a brane. That can be a membrane, space, line, or a higher dimensional entity. Closed strings are not bound to a specific brane but can act across brane boundaries. String scientists have proposed that our universe is a three-dimensional brane, but they have not yet suggested that other three-dimensional branes with other dimensions may exist around us.

The only closed string known, represents the gravitational force. Therefore, gravity can act between different parallel universes according to string theory. Physicists have already measured an unexplained influence on our universe by gravitational force. This is called dark matter which seems to be lumpy and often associated with ordinary matter in our universe, and dark energy which seems to be evenly distributed. They have different theories about various physical particles that could represent dark matter. Detectors have been built with no detection after lengthy testing periods as an article<sup>12</sup> from Rensselaer Polytechnic Institute shows. Proposals for what dark energy might be are very speculative.<sup>13</sup> The possibility that the gravitational influence comes from parallel universes is still open.

The mathematics of string theory requires nine spatial dimensions. We know of only three spatial dimensions, so the extra six dimensions are assumed to be compactified and curled up to such a small size that they cannot be measured. The curling up of dimensions can be done in many different ways ( $10^{500}$ ) each way gives different laws of physics for the universe. The one way of curling up the dimensions that should give our universe is not yet found. If we let the extra six dimensions be open and used for two parallel universes, one for dark matter and another for dark energy, then we have solved a basic uncertainty with the string theory and we have a proposal on what dark matter and dark energy could be.

Such parallel universes are a new concept and may need some time for mental digestion. But it seems to match well to existing knowledge about the cosmos. Empty space called

vacuum is known to have energy in itself both according to quantum mechanics and according to measurements.<sup>14</sup> Empty space itself is something rather than nothing. The vacuum may in some way represent the parallel universes. The energy level per cubic meter is not determined, but the unevenness called quantum jitter causes particles to erupt out of the vacuum and to disappear again. I find that each parallel universe consists of three components: Matter particles, forces that interact between particles, and vacuum that supports the existence of particles and forces. I cannot see a reason why such parallel universes with different qualities should not exist. Physical matter is one quality, mind and consciousness represent other qualities that could be contained in other universes. Vacuum and interbrane forces such as gravity could connect the different universes so that single organisms can take part in and contain qualities from all universes, by means of having entangled bodies from the various universes. General relativity tells us that gravity is not a normal force that acts between certain matter particles. Gravity interacts with (changes the density of) the vacuum that seems to interact with matter particles from all different universes.

The mathematics of early versions of string theory was expressed with many different dimensions. When supersymmetry was introduced, the number of dimensions were reduced to ten. Time and nine different spatial dimensions, as mentioned before. Supersymmetry is the breaking of a mother particle into a matter particle and a force particle. All known particles must have their supersiblings according to supersymmetry, but the specific supersiblings of physical particles have never been found, which is an unsolved issue with string theory. Parallel universes could contain supersiblings that probably are too different from physical matter to fit into the physical universe. String theory maintains that supersiblings should be 1000 times more energetic than their physical siblings. This might be too much for the vacuum of the physical universe. String theory also maintains that physical matter does not represent a full vibration of a string which is much more energetic. Physical matter particles come about as strings that are partly canceled by quantum jitter. Measurements of dark matter and dark energy also show that physical matter is only 5% of the total mass/energy of the cosmos. Dark matter and dark energy universes are good contenders for providing the missing 95%.

Matter multiplied by force across space/length makes energy. Supersymmetric breaking seems to provide each universe with three components, matter, force, and space, that make up energy. If the cosmos before the Big Bang was an expanding and cooling universe containing pure energy particles, then the Big Bang could have been a phase shift where the supersymmetric breaking took place and one universe broke into three different universes with different energy levels and different qualities. Supersymmetry has several major uncertainties described by Peter Woit.<sup>8</sup> His book, which is critical of string theory in general, says that: Supersymmetry advocates describe the situation with phrases such as “the lack of a compelling mechanism for supersymmetry breaking” (they have not yet found a good description of how supersymmetry broke). One of the major uncertainties is that

the supersymmetric string theory seems to require another (third) set of superpartners. This third set might actually improve the chances of making string theory match observed reality. That should be kept in mind when we further down make a more detailed description of dark energy which is different and special.

The evolution of superstring theory was a major undertaking of a large number of physicists. Eventually, there were five different mathematical theories. Ed Witten showed that by introducing another dimension called “coupling strength” or “dilation,” all theories could be shown to be part-solutions of one overarching theory which he called M-theory. This is what normally is referred to as string theory today. It requires a cosmos of 11 dimensions. No-one has found a real-world explanation of this 11th dimension, so it is assumed to be curled up and compactified in the same manner as the extra six spatial dimensions.

### III. WHAT ARE COSMIC DIMENSIONS?

It is easy to add an extra dimension to a mathematical calculation, but how are the dimensions of the cosmos determined? We know of three spatial dimensions and one time dimension. A general definition of a dimension is a degree of freedom, but for what? For the hereby proposed cosmos, I suggest that a cosmic dimension is a degree of freedom for the attention. Attention is a tool used by the consciousness to limit the incoming information. Attention has a center that is clear and a periphery which is more blurred. We can direct the center of our attention around in the room which represents three dimensions. Attention is bound to the flowing time with a possibility to go backward by memorizing and forward by planning, without leaving the spatial position, so time is clearly an independent degree of freedom for the attention. But attention has a fifth degree of freedom—the scope-of-view. Wherever the attention is in space and time, we can widen or narrow the attention. Using other words: We can be more or less concentrated. This is a kind of coupling strength, how strongly the consciousness is coupled to the situation, so here is a strong contender for explaining the 11th dimension in string theory. In this case, consciousness and attention are seen as a part of the cosmos. They are part of the mathematical model that describes a complete cosmos, and consciousness can influence and be influenced by other parts of the cosmos.

When two universes have different spatial dimensions, then distance in the two universes must express different qualities. In the physical universe, we have physical distance. We all know what that is. But what distance do we have in the psychological room/universe and the intuitive room/universe of the mind as explained below? Both rooms have a kind of associative distance between items. In the psychological room containing thoughts, memories, dreams, and emotions, I will call it an emotional distance. In the intuitive room, containing personality, worldview, and other nonphenomenal entities that only have quality and complex information associated with different entities, but no form, I will call it a quality distance. I think we have a slight hunch of what the distances mean in reality. Persons being mentally

close to each other have minds that are close to each other in the psychological room, they are emotionally close. Some people can match well without being emotionally close, they have good chemistry as we say. They share some qualities. They have qualities that are close.

### IV. MIND

We are now set on a course where mind and consciousness are regarded as an integral part of the cosmos. Physical instruments do not work properly with nonphysical phenomena, so we have to rely on human reports of observations that can be fraudulent and false, misinterpretations, or neutral description of observations. It is a challenge for science to sort out what is real and what is false when investigating the mind, and to meet the cultural counterforces for such research. But to avoid taking human experiences seriously is, in my view, a deviation from a scientific attitude.

In order to make a neutral scientific description of mind, I have chosen two organizations that are engaged with mental phenomena and seem to have a scientific attitude toward their explanations, and stay true to their experiences. I try to make a model of the mind that supports their main findings.

International Academy of Consciousness, IAC,<sup>15</sup> “is dedicated to the study and education of the consciousness of the self.” One main activity is teaching students to have out-of-body experiences, but they also arrange a series of conferences<sup>16</sup> on general knowledge of consciousness, that attract presenters from universities and other institutions, a mix of research, theory, experience, and product presentation. The main issue for this article is their description of the out-of-body experience (OBE). Several of the leaders claim to have had regularly spontaneous OBEs, which can happen from wake state and from sleep state. From wake state, they can intentionally visit other physical locations and report back what was going on at that location. They maintain that both humans and animals have OBE during sleep. Friends can occasionally meet during OBE while sleeping/dreaming and verify it for each other after waking up. Persons experiencing OBE are wearing a kind of etheric body that has a “silver cord” going back to the physical body. If these reports<sup>17</sup> are correct, their experiences are experiential support of—and can be explained in a general way, by the cosmic model presented in this article. Because, while dreaming, the attention may have fallen into the psychological universe where matter and physical laws feel strange to the rational part of our minds.

Acem international school of meditation<sup>18</sup> was started by students in 1966. Today several leaders of Acem are professors in medicine, psychology, neurology, physics, law, etc. A psychology of meditation has been developed for the benefit of meditators to understand what is going on during meditation.<sup>19–21</sup> Scientific articles about meditation have been published.<sup>22,23</sup>

For this article, the most important information from Acem is the understanding and description of the mind. The spontaneous activity of the mind is one of the central issues of Acem-meditation. It represents both the creativity and the unfulfilled parts of the person’s history. By receiving and

accepting these parts of himself, the meditator relaxes with many benefits and can come into a process of psychological growth. Spontaneous activity of the mind has thoughts on three levels. Rational thinking as in wake state, magico-metaphysical thinking as in dreams and intuitive thinking as in deep sleep. These three levels of thought can be present more or less simultaneously, especially during long meditation retreats, but can also be like lucid dreams and self-conscious deep sleep—the body can be in deep sleep while the mind is self-conscious. The thoughts in the deep-sleep state have no content except for an atmosphere or a quality, they are nonphenomenal. Elapsing time is lost and the attention is opened. Acem has introduced a concept of the timeless self. The state-of-mind has a certain quality that can change from time to time. An intuitive thought has a certain quality and can be realized in real life in many ways depending on the circumstances. Like sound can be transformed by the Fourier transform between a time variable and a frequency variable, dark energy also might have a kind of transformation from physical and psychological universes to something that is evenly distributed throughout the physical universe—such as a probability function. We have a collapse-function that transforms intuitions to something in real life. But an activity initiated by intuition will always enable the quality of the intuition to influence the real world.

In many ways, intuitive thoughts are like quantum waves, they are information only, very complex information that can represent mutually exclusive forms. The form is selected when intuition collapses to something real in a certain environment. Consciousness seems to be necessary to transform the intuition/quantum wave into the real world—a consciousness that observes and initiates action. This kind of consciousness is our innermost observer and actor, it is the “life” part of us. It is not just the state of some physical matter that causes conscious experience. It is probably a non-physical body based on a substance that is entangled with our mind and physical body to create a living organism. In Section V, I will discuss which qualities this kind of consciousness possesses that makes it different from both body and mind.

The three levels of thought could be associated with the three different universes. Rational thinking is present when the attention is in the physical universe. Magico-metaphysical thinking is present when the attention has fallen into the psychological universe such as when dreaming. Intuitive thinking is present when the attention is embedded in the intuitive universe—when in deep sleep. We are normally not self-conscious in this last state.

A mind consisting of two parallel nonphysical universes seems to support the observations made by IAC and Acem. The psychological universe contains dark matter, dreams, memories, and an etheric body, and the intuitive universe contains dark energy, personality, worldview, and other information containers that have no form but could have quantum characteristics. This dark energy universe could be a quantum universe. Quantum mechanics has proven to be incredibly correct and it could turn out to be the fundamental principle of a separate universe which, in some ways, is at the root of the psychological and the physical universes.

Then we have a quantum body that is partly expressed in our physical body and psyche.

## V. CONSCIOUSNESS

In the 1930s, the development of quantum mechanics indicated that negative energy should exist (not bad energy but a kind of opposite energy). The main physicists thought that this kind of energy must rely on negative matter which had never been found, so they concluded that negative energy was not part of the real world. One of the leading mathematicians of the time, Luigi Fantappiè,<sup>24,25</sup> was curious about what negative energy really was and found that it had qualities of life. Negative energy makes order with time whereas normal energy destroys order with time, and something in the future is the driving cause of a process based on negative energy. Everything we do as conscious beings are driven by a wish to arrive at a more desirable state in the future. That state is the driving cause for what we do now. Mathematics shows that negative energy can exist in a fourth parallel universe that has different dimensions from the universes having positive energy.<sup>26</sup> If such a parallel universe exists, it is all around us. What Fantappiè called life could be the same as we have defined as consciousness. We could all have a consciousness body that is entangled with our physical body and our mind. Consciousness and (positive) energy/matter could be equally important parts of the cosmos, which means that the entropy increase with time for positive energy is balanced with an entropy decrease for negative energy. This can mean that the total consciousness is bound to evolve to a higher level with time while the matter is bound to disintegrate. String theory seems to be a theory for all variants of positive energy. Since the seer cannot see himself, a theory of negative energy might be out of reach for rational science.

The discovery made by Fantappiè was very controversial at the time, and it was not properly published, but it should be possible for a mathematician to verify it today. The findings of Fantappiè are known today thanks to an Italian statistician Ulisse di Corpo who rediscovered the work of Fantappiè.<sup>27</sup> Also others have published works made by Fantappiè.<sup>28,29</sup>

## VI. THE LIFE OF COSMOS

I have proposed that the Big Bang was a phase shift where hotter and more dense energy split into matter and mind. If that is the case, a pulsating (expanding and contracting) physical universe becomes less probable, and an eternally expanding universe and cosmos sail up as the most likely, also because the expansion of the universe is found to accelerate. Our universe may ultimately go through a Big Rip when expansion speed becomes faster than the speed of light. Then elementary particles cannot hang together anymore using electromagnetic—or the nuclear forces. The vacuum cannot support physical particles and forces anymore. This seems like a new phase shift where a new universe emerges where mind and matter can exist in a single universe such as it was before the Big Bang. But now the mind is evolved and widened and smaller individuals are dissolved into it. The matter is dispersed. There is no split between

matter and mind anymore. The expansion can continue forever, time is running faster and faster and the scope-of-view of a united highly developed consciousness gets wider and wider.

What happened before the Big Bang? Maybe just an expansion? The starting point of cosmos eternally long ago must have been a singularity with infinitely high density and time going infinitely slowly. The scope-of-view being infinitely narrow. Each particle is an individual entity by itself. Consciousness/negative energy has maximum entropy which is a great potential for self-development, the positive energy has minimum entropy which is a great potential for creation.

Given the description above, the start seems to be viewed from outside of the cosmos while the end seems to be viewed from inside of the cosmos. The start and the end could actually be equal except for the point of view. Many of us have comparable experiences of swapping views. When you defocus on some computer-made images, they reveal something that you were not able to see before. Traversing the singularity from the far future to the far past could be something like that.

Consciousness is the observing and acting part of the cosmos, but it cannot see itself or act on itself. There seems to be a force binding negative and positive energy together—call it identification. Consciousness can know itself by observing positive energy. String theory says that an open string can have ends connected to different branes. Identification force can be of this kind and connect negative and positive energy, so that we—life, is identified with mind and body. Consciousness can be separated into a number of greater and smaller identities according to the organization of positive energy. But we are all made of the same stuff and have a common identity at the bottom.

Timelessness is a real experience in meditation. This state of mind has quality but nothing is moving. If the model above is seen from a timeless vantage point then nothing really happens. The whole model is observed as static. Time is just another dimension that displays a certain quality from what is already there. From a timeless state, you can enter the cosmos at any time and any location and experience what is there. But everything is present as a possibility in timelessness. The model of the cosmos presented here is both static and dynamic, depending on the point of view.

If the mind is part of an ever-expanding cosmos, then this expansion will certainly have some mental influence. The available scope-of-view and speed-of-time will always increase. For each new generation and each individual, there will be an increased potential for mental growth and the possibility to see things in a new light. The old saying that “the truth is moving” gets a physical cause. All ideologies and religions will eventually be outdated according to a law of nature. A most demanding challenge for science and societies is to renew itself in line with present potential.

## VII. INTEGRATION OF THE MENTAL AND THE PHYSICAL

At the Big Bang, the cosmos may have been separated into parallel universes consisting of consciousness, matter,

and mind, as explained before. We all know that these parts are working very well together. If these parts of us are separate bodies, they must be intimately entangled. String theory, General Relativity, and Newton’s laws support this integration by enabling signals between the different universes. Particles made by closed strings, such as gravity, can influence different branes/universes by influencing the vacua.

From experience, we know that consciousness (which represents the will) can influence mind-objects such as thoughts, fantasies, and dreams. Some people also claim that they are able to move physical objects by will and some claim that spirits have hampered physical objects. Here is an explanation of how Newton’s law can support that: Dark matter (=mind matter) on human scales does not influence physical matter because the gravity force is so weak. But since the electromagnetic and nuclear forces do not interact between dark matter and physical matter then dark matter particles can take the same position as the physical particles. According to Newton’s law, when distance approaches zero, the gravity force increases enormously, so if you can move mind-matter into a physical object so that single particles lock on to the physical matter and then you move the mind-matter, the physical object will hang on because of the strong gravity force. This is a way that consciousness and mind can influence matter.

To signal from matter to mind and consciousness, we probably need something different from gravity. There could be other undiscovered forces made by closed strings. They are probably weak and far-reaching such as gravity, so they could have omitted detection so far. My proposal for such a force is claimed to be associated with all kinds of living organisms. It is called the aura. We find it in religious paintings and in Kirlian photography,<sup>30</sup> where high voltage is used in combination with biological organisms to catch light that seems to radiate from the biological organism. The radiation seems to change according to the psychological state of the organism. Little science has been applied to this phenomenon because of missing interest from the mainstream. The phenomenon is not understood.

The Penrose-Hameroff theory (the Orch-Or theory) for creating conscious moments could be a description of an interbrane signal transmitter that is embedded in all living cells.

According to the IAC, we have a kind of etheric body that is an exact copy of our physical body. (The physical body is probably formed by the etheric body.) This etheric body must be entangled with the physical body to enable subtle mental control of all physical functions on many different levels, from the consciousness and mind via the gravitational force. Such functions could be gene control and body formation, wound healing, emotional influence on muscles, etc. The etheric body is also described in the Tibetan Book of the Dead, it leaves the physical body from the top of the head at the moment of death.

## VIII. CONCLUSION

This article combines knowledge of the mind established by two scientifically oriented organizations—with physical

models such as general relativity and string theory. The synthesis is a new worldview based on a model that is both materialistic and panpsychic. The model is speculative in that it proposes some new assumptions for string theory and establishes a new definition of consciousness. But with this starting point, a range of enigmas within physics seems to be solved and string theory seems to match the real world as it is observed. The resulting cosmic model is made up of a few parallel universes that have different laws of physics, energy levels, vacua, and have different spatial dimensions. All universes are all around us. They are 1: The physical universe containing physical objects; 2: The psychological universe containing thoughts, dreams, and memories based on dark matter; 3: The intuitive universe containing personality, world-view, and other nonphenomenal quantum information that represent different qualities, based on dark energy; and 4: The consciousness universe containing negative energy that is connected to the content of the other universes by a force called identification. Biological beings could consist of bodies from the four different universes that are entangled into one living organism. Antimatter is not mentioned in this article—an indication that the analysis is not complete. The take-home message is that parallel universes with different dimensions and laws of physics might exist and could solve some enigmas in today's understanding of life and the cosmos.

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