

Does the Triadic Dimensional Vortical Paradigm (TDVP) alter the landscape from 4D science to 9D science?

The controversy of conventional scientific materialism versus integrating multidimensionality, the infinite and consciousness.

**Vernon M. Neppe MD, PhD, FRSSAf, DPCP(ECAO), DSPE^{abcd}
and Edward R. Close PhD, PE, DF(ECAO), DSPE**

Abstract

We describe a 5-part series reflecting the perceptions of the limitations of our experience when applying our current conventional physical paradigm of three dimensions of space—length, breadth and height—in the present moment of time (3S-1t). This application of 3S-1t has been called ‘4D science’. We use the term ‘9D science’ to include higher dimensions, in this instance the 9 dimensional model which was definitively demonstrated in the Neppe-Close Triadic Dimensional Vortical Paradigm (TDVP). We further apply the term ‘9D plus science’ (9+D). This incorporates the interface of 9D science with the infinite.

Our physical macroreality appears somewhat adequate when working simply within 3S-1t, because the rules of our world are consistent and easily applicable. However, even then, factors pertaining to consciousness are almost completely excluded other than by applying consciousness at the level of the brain and nervous system neurologically and psychologically. However, at the quantal and the cosmological levels, multiple unexplained conundrums and even contradictions arise. These problems must be solved to explain our reality. Yet, we usually ignore these quandaries, disregarding anything unexplained beyond our current concept of reducing everything to 3S-1t. This might constitute a threat to our current training in 4D science, and the adverse emotions generated by the new findings we’ve demonstrated are difficult for even exceptional IQ individuals to handle.

In Part 1, we list 50 conundrums that reductionistic materialism cannot solve plus another 11

^a Vernon M. Neppe MD, PhD, Fellow Royal Society (SAF) **, DPCP (ECAO), DSPE, and Edward R. Close PhD, DPCP (ECAO), DSPE *. Pacific Neuropsychiatric Institute, Seattle **; and Exceptional Creative Achievement Organization (Distinguished Fellow *, Distinguished Professor **) For perspective, Prof. Neppe is a Behavioral Neurologist, Neuropsychiatrist, Neuroscientist, Psychopharmacologist, Forensic specialist, Psychiatrist, Phenomenologist, Neuroscientist, Epileptologist, Consciousness Researcher, Philosopher, Creativity expert, and Dimensional Biopsychophysicist. His CV includes 11+ books, 2 plays, 700+ publications, 1000+ invited lectures and media interactions worldwide (<http://www.vernonneppe.org/about.php>). Dr. Close is a Physicist, Mathematician, Cosmologist, Environmental Engineer and Dimensional Biopsychophysicist. *Transcendental Physics* is one of Dr. Close's 8+ books. (www.erclosetphysics.com). Neppe and Close co-authored *Reality Begins with Consciousness: A Paradigm Shift That Works*. www.Brainvoyage.com

^b The material in this article has been peer-reviewed by many readers.

^c *Acknowledgements*: Our great thanks go to: Adrian Klein PhD of Israel for his astute observations not only in this paper, but over many years; Stanley Krippner PhD of the USA, our great common-sense mentor who has inspired us even in this paper; and Surendra Pokharna PhD of India, whose recent intensive studies of TDVP and 9D science with several Indian physicists is inspiring new ideas on all sides. We greatly appreciate Dr. Leonard Horowitz and Joseph Slabaugh for their critically important feedback; and Erich Von Abele for pertinent editorial suggestions.

^d Citation: Neppe VM, Close ER: Does the Triadic Dimensional Vortical Paradigm (TDVP) alter the landscape from 4D science to 9D science? The controversy of conventional scientific materialism versus integrating multidimensionality, the infinite and consciousness. *IQ Nexus Journal* 10: 3, v6.775; 7-46, 2018.

major questions. These are insoluble in 4D science, yet appear eminently soluble by applying the principles of 9D or 9D+ science. In Part 2, we emphasize specifically two major findings, quantized, volumetric finite 9D reality and gimmel, pointing out the reasoning for such studies. In Part 3, we discuss examples from the scoffers or deniers. Even some highly intelligent individuals may not be able to interpret new data properly, as specific training and objectivity is required. In Part 4, important differentiations relating to proof and speculation are made. Finally, in Part 5, we discuss the importance of the Neppe-Close Lower Dimensional Feasibility Absent Falsification philosophy of science, as well as extending the model of Kuhn's revolutions to 11 stages, applying the 11-NCR (Neppe-Close Revolutions) model, and using this in the context of scientists understanding changes in 4D to 9D. Peer review, though important, may also be problematic.

We discuss how the concepts of gimmel, of infinite order ('ordropy' as contrasted with physical 'entropy' in the finite 3S-1t) and the 'Law of Conservation of Mass, Energy and Gimmel' are related to the infinite, and the impacts on our 9D science. In contrast with gimmel, the concept of gluons, while fitting the logic for mass of nucleons in 4D science, is impossible to reconcile with 9D science because based on empirical mathematical calculations, gluons are demonstrably unstable. The difficulty with the ephemeral nature of the Higgs Boson is also, problematic, but that too, may also be solved by recognizing the application of gimmel, instead.

The 9D and 9D+ science model is a functioning and unrefuted major paradigm shift, that involves several major supporting empirical demonstrations and mathematical proofs, and has grown over the past seven years through applying the many features of the Neppe-Close TDVP model. It incorporates our current physical 3S-1t 4D science. 9D is mathematically proven, and empirically relevant given that the Mass-energy-gimmel-volumetric data in the Triadic Rotational Units of Equivalence of the Triadic Dimensional Vortical Paradigm exactly equal the Mass-energy equivalence normalized data in the CERN Large Hadron Collider. Moreover, TDVP is further demonstrable cosmologically, because the TRUE figures correlate very, very closely with the Hubble dark matter and dark energy Planck probe results. These allow us to unify our existence into one law of nature including the quantal, macroworld, and cosmological levels.

Key-words:

4D-Science, 9D-Science, 9+ D-Science, 11 NCR, 11-Neppe-Close-Revolutions, Cabibbo Angle, CERN Large Hadron Collider, Close, Consciousness, Conundrums, Cosmology, Cynics, Dark Energy, Dark Matter, Deniers, Dimensions, Dimensional Biopsychophysics Diophantine Equations, Electrons, Equivalence, Gell-Mann, Gimmel, Gluons, Higgs-Boson, Hubble data, Infinity, Interdisciplinary, Koestler, Kuhn, Life-Elements, LFAF, Lower Dimensional Feasibility Absent Falsification, Mass-Energy Equivalence, Materialism, Mathematics, Neppe, Normalized Data, Pokharna, Popper, Peer-Review, Physics, Proof, Pseudoscience, Pseudoskeptic, Quantum, Quarks, Refutation, Scientists, Scoffers, Skeptics, Speculations, Stability, TDVP, Triadic Dimensional Vortical Paradigm, TRUE, Triadic Rotational Units Of Equivalence, Volumetric, Vortices.

4D science: Blindness or logic? Part 1

Vernon M. Neppe MD, PhD, FRSSAf, DPCP(ECAO), DSPE
and Edward R. Close PhD, PE, DF(ECAO), DSPE

George Bernard Shaw in his 1918 play *Annajanska* famously pointed out ¹:
“All great truths begin as blasphemies.”

Because of the domination of science and technology in all walks of life, an impression has been created that our current scientific knowledge (applying just three space coordinates and one time coordinate—3S-1t) is the complete source of knowledge. It is linked with the Standard Model of Physics (SMP) ²⁻⁵. But the SMP appears to be incomplete because there are numerous unsolved conundrums and paradoxes at the quantal and cosmological levels. ²⁻⁵

The conventional scientist, steeped in physical materialism, does not realize there is anything wrong with this idea because they've only been trained in '4D science' —as the Indian atomic physicist, Surendra Pokharna PhD ⁶⁻⁸ calls it. This 'Science 4' reflects the prevalent view of many scientists involving conventional physical 3S-1t *experience* as the whole of reality.

Pokharna contrasts our current '4D science' with '9D science'. ⁶⁻⁸ This involves 9 dimensions in the finite reality. The detailed seeds of the idea of a 9-dimensional quantized vortical finite reality was first justified by Edward Close and Vernon Neppe in 2011 in the first two editions of their classic book *Reality Begins with Consciousness: A Paradigm Shift That Works*. ^{9; 10} They developed hundreds of concepts in detail over the next few years until the final 5th edition of this book in 2014. ¹¹ During this time, they first hypothesized a mathematical proof of specifically a 9-dimensional reality, and then, in 2013, demonstrated the definitive proof of their paradigm ¹¹: Specifically, these scientists described a metaparadigmatic model which they've called the 'Triadic Dimensional Vortical Paradigm' (TDVP) ¹¹. TDVP has continued to grow over several years, with proofs of several new testable hypotheses, yet it has never been refuted. ⁸ This includes the landmark mathematical demonstration of the necessity for a ubiquitous third massless, energyless component to reality variably described as a 'process', 'substance', 'agent' or 'vehicle' called 'gimmel'. Mathematically, gimmel is in necessary union with all stable particles, without which atoms would fly apart. ¹²⁻¹⁶

Historically, with great respect, a half-dozen independent scientists from several countries who have studied TDVP in detail are independently regarding it as the most important paradigm shift of the twenty-first century. Will this high regard bear itself out? Time will tell. Yet, conversely, TDVP also evokes palpable distress amongst members of the religion of 4D science. Fortunately, in these civilized times, at least they don't want to burn us at the stake!

“Something so radical cannot be true! We will fight against this humbug! We must vanquish

TDVP and 9D. Neppe and Close are compromising the very fabric of our current scientific beliefs. This is a profound conceptual threat. We must defeat them!”

9D science recognizes 9 finite quantized volumetric dimensions and is, with respect, far more complete than any other model described before. The Neppe-Close 9D model incorporates, too, 4D Science. Therefore, 9D+ science does not ignore our physical 3S-1t reality: It just adds to it. ‘Science 9’ is not speculative or just hypothetical, like the various String and Superstring Theories that work with multiple dimensions and usually involve curlings or foldings¹⁷⁻²¹, not the necessary vortical rotations in TDVP, and, unlike TDVP, do not generally recognize consciousness, extra time dimensions, infinity, and unification of all. Instead, we know that we *exist* in 9 finite quantized dimensions because of the demonstrable (Close-Neppe) mathematical *proof* and moreover, that this is not just a mathematical operation, but empirically relevant quantally^{12; 22} and cosmologically^{12; 22}. We (Neppe and Close) can add just to the concept of Science 9 in the finite, by recognizing ‘9D+ science’: the 9D+ concept necessarily incorporates the continuous infinite and the still discrete, quantized transfinite²³⁻²⁸. That addition is needed to complete a metaparadigmatic¹¹ (so-called ‘theory of everything’ —TOE—model^{27; 29}) because otherwise the limiting factor would be ‘incompleteness’ as reflected by ‘*Gödel’s Incompleteness Theorems*’.^{30; 31} Something must be outside the box so to say.

9D+ science makes a big difference in solving the many ostensibly insoluble conundrums of SMP physics. This existence includes a ‘Consciousness’ that most in the physical reality don’t even realize exists, because it likely reflects a pervasive higher consciousness mainly outside the brain. This extended consciousness interfaces continuously with our finite reality. It reflects both the infinite continuity¹¹, but it even occurs at the most fundamental quantized level.¹¹

Sir Arthur Eddington, PhD, in 1938³² in *The Philosophy of Physical Science* famously described his lengthy analogy. This metaphor reflects the key theme of this paper:
“Let us suppose that an ichthyologist is exploring the life of the ocean. He casts a net into the water and brings up a fishy assortment. Surveying his catch, he proceeds in the usual manner of a scientist to systematize what it reveals. He arrives at two generalizations:

(1) No sea-creature is less than two inches long.

(2) All sea-creatures have gills.

These are both true of his catch, and he assumes tentatively that they will remain true however often he repeats it. In applying this analogy, the catch stands for the body of knowledge which constitutes physical science, and the net for the sensory and intellectual equipment which we use in obtaining it. The casting of the net corresponds to observation: for knowledge which has not been or could not be obtained by observation is not admitted into physical science. An onlooker may object that the first generalization is wrong. There are plenty of sea-creatures under 2 inches long, only your net is not adapted to catch them.”

The ichthyologist dismisses this objection contemptuously.

“Anything uncatchable by my net is ipso facto outside the scope of ichthyological knowledge. In short, ‘What my net can't catch, isn't fish’ Or — to translate the analogy — ‘If you are not simply guessing, you are claiming a knowledge of the physical universe discovered in some other way than by the methods of physical science, and admittedly unverifiable by such methods. You are a metaphysician. Bah!The math is not there till we put it there.’”^{33, 34}

Dialog with a respected 4D scientist

A highly respected, and well-known PhD Professor in the biological sciences steeped in the scientific materialism on 4D science, wrote to Vernon Neppe MD, PhD on 12 July 2018. Rather typically he had not studied any 9D science or any of our TDVP work. His description was appropriate for a 4D-scientist:

“There seems to be a large pseudo-scientific community who love theories that separate the mind from the body, but I have yet to see a theory (as much as I would love to believe I somehow persist after my body functions shut down) that shows that consciousness is more than just an emergent property of the neural system component of a total body system that only becomes conscious through learning within the womb and subsequent to birth. That consciousness will close down on your way to final bodily function shutdown. Not that consciousness remains largely an unsolved mystery! But making up scientifically unsupported stuff about it does not enhance our knowledge, though it may enhance our feeling of wellbeing. I believe we may come to understand consciousness as something necessary for strategical planning, which would be a great boon to the fitness of an organism only able to implement tactical decisions on the scale of generational time.”

Dr. Neppe responded:

“Let me not to the marriage of true minds admit impediments. I respect you too much. You are correct that our TDVP work logically provokes incredulosity from that majority of scientists who regard the Standard Model of Physics (SMP) as very adequate.”^{11; 35; 36} *This might be even though they recognize there are unsolved or contradictory elements certainly at the quantal level in the SMP*¹¹ *(and just regard it as ‘weirdness’*^{37; 38} *or similar such term). Our TDVP work greatly respects the findings of the SMP. We’re able to live our lives knowing there is predictable and often replicable order. However, TDVP also particularly recognizes those SMP limitations of quantum physics and cosmology and extends them, and explains a large number of other conundrums, proving the math bases to many of those.”*

With respect, this view by the 4D scientist is not new. This reflects *the prevailing materialist view of our world*. It is a sophisticated view, yet incomplete, something that might be confessed by many progressively-leaning 4D scientists who might point out:

“There is nothing else: We know everything other than minor little components. Yet, we recognize the obvious fact that there are three different, separate realities.

- *There is first, our macro-world of physical reality and everything we’ve learnt tells us this is appropriate and we can work with it.*
- *There is secondly, our world of quanta described through ‘quantum mechanics’. We must*

just simply accept that, because we actually know that there is a ‘weirdness’ that we cannot explain. ^{37; 38} *That is normal and okay. That’s why it’s ‘quantum’.*

- *Third, we must recognize, too, what the cosmologists tell us, that there is Dark Matter and Dark Energy. We don’t know too much about these dark substances because they are ‘dark’, and they don’t reflect light or energy. But we know that they constitute over 95% of our world, and that they’re very important.”*

Are such words of certainty familiar? Is our main knowledge complete? Or have these possibly false convictions happened before? Have we gone through a phase where we’re sure that everything that is in our world, nay, our reality, is known and there just are the details to fill in? *This certitude reflects the sad, rejected history of new paradigms.*

Ironically, by simply putting gimmel—the likely agent of consciousness—into the equations of reality, all three of these areas become based on one single law of nature, not three diverse scenarios, and we can even understand biology more. These are only soluble by applying 9D+ science, not just 4D science—a part of 9D+ science.

However, *the rejection of major new paradigm shifts is common and almost required.* Non-acceptance has historically been a problem with numerous pioneers. *It is extremely easy to throw mud at great discoveries.* But that mud must have mathematical and empirical proofs, but often these do not exist. Instead, these ‘scoffers’ are one or more of: ignorant of their own ignorance, jealous, threatened, inadequate, incredulous, uneducated or losers. *With their words, may flow forth their character or, more kindly, their incomprehension. This is the unfortunate heritage of the great innovative original scientist. Yet, in another way, it’s a backhanded compliment that recognizes how he’s intimidating the mainstream.*

The victims of such *mud-throwing, or just being ignored,* ranges very broadly. A little known example was Georg Cantor PhD ³⁹, who was rejected and abused for his creative awarenesses, but eventually won the Sylvester Prize in 1904. Dr. Cantor was recognized particularly not only for Set Theory, but recognizing one-on-one correspondences, and for revolutionizing the concepts of the infinite, including the transfinite and infinity of infinities.

The great Albert Einstein ^{40; 41} is another example: He spent the years 1915 to 1919 being rejected until that same Arthur Eddington PhD demonstrated on 29 May 1919 that General Relativity empirically works. ^{32; 42} Then Nicola Tesla was the great genius whose findings on modern alternating current were never accepted during his lifetime. Another example was Ignaz Semmelweis MD who was brutally rejected for pointing out that hand-washing saves lives and had a tragic history thereafter. Similarly, Gregor Mendel’s genetic inheritance pre-Darwin was rejected; and Alfred Wegener was rejected for describing continental drift. These spurnings go back to antiquity: Aristarchus, some 2400 years ago, discovered the heliocentric solar system, but was derided by his ‘more knowledgeable colleagues’.

Their only crimes? Daring to be heretical or daring to show the limitations of the current reality. They were all so far ahead of the curve that this was very threatening.

Arthur Koestler in his book, *The Sleepwalkers*, summarized it best: “*Innovation is a twofold threat to academic mediocrities: it endangers their oracular authority, and it evokes the deeper fear that their whole, laboriously constructed intellectual edifice might collapse.*”⁴³ That we exist subject to the unified laws of nature’s 9D+ science is not incorrect. Our finding is just new. The great physicist who discovered the quantum⁴⁴, Max Planck famously pointed out that “*major paradigm shifts in science advance only from funeral to funeral*”⁴⁵ Ironically, Planck’s ideas, too, were initially rejected as “*crackpot*” at first.⁴⁶⁻⁴⁸ Frank Sulloway,⁴⁹ historian and sociologist of science, in “*Born to Rebel*” covers scientific changes that were resisted or embraced change. Almost every major revolutionary breakthrough had some thinkers who rejected it as “*crackpot*” at first. Other examples include Copernicus, Hutton, Darwin, Descartes, Newton, Lavoisier, Lyell, and Lister.⁴⁹

We could add a modern medical example of Warren and Marshall with helicobacter causing peptic ulceration and the related dialog:⁵⁰ “*But I thought biologists were too close-minded?*” “*‘No one believed it: The Australians’ idea was very much against prevailing knowledge and dogma because it was thought that peptic ulcer disease was the result of stress and lifestyle,’* Staffan Normark, a member of the Nobel Assembly at the Karolinska institute, said at a news conference.”

Fifty unsolved conundrums in materialism: The limitations of the 3S-1t model.

Neppe continued his rhetoric with the materialist-oriented 4D scientist:

May I, for my own understanding, clarify how you solve the following 50 short questions? These are just examples of 50 questions that as I see it the SMP¹¹ cannot answer.

1. How can you explain ‘quantum weirdness’?
2. How can you explain dark matter and dark energy? What are they? Are they necessary? How can they be incorporated into scientific understanding?
3. What are the common features of the life elements and why?
4. How do you explain that the Cabibbo mixing angle is about 13.04 degrees? Why is the Cabibbo quark mixing angle exactly what it is?
5. What areas in physics can the standard model not explain?
6. What would happen if there were a 9-dimensional reality? What qualities would that 9-dimensional reality need to be stable?
7. Why is the concept we’re taught mathematically in schools of Protons, Neutrons, and Electrons producing Atoms incorrect? How can we solve that?
8. How can you mathematically refute atomic materialism?
9. Why is Deuterium so important?
10. Are the mass-energy-volume figures from the Large Hadron Collider correct? If so, what would happen if an entirely different model with a massless, energy less third substance generated the same figures? Why?

11. Can we have multidimensional time?
12. Why is gimmel so relevant in beta decay?
13. Why are vortices so fundamental?
14. Why are atomic particles not really particles but vortices?
15. Why might gluons not exist?
16. What can replace the Higgs Boson?
17. Why is there conservation of mass, energy and gimmel implying order as well as disorder?
18. Why must the laws of nature must be unified: How are they unified and universal?
19. Why is everything in nature volumetric in space, time and consciousness.
20. How does entanglement occur? What is quantum entanglement?
21. How do you explain half-spin, one-third spin, two-third spin for example?
22. What properties make for life elements?
23. Why must silicon be a life element?
24. Why must continuous infinity envelop the finite discrete?
25. Why are protons composed of three quarks?
26. Why are neutrons composed of three quarks?
27. Why are each of those six quarks different?
28. How do we measure multidimensional consciousness?
29. Why are most of the particles of the “particle zoo” ephemeral?
30. Why do fermions have a $\frac{1}{2}$ intrinsic spin?
31. Why Hydrogen atoms have no neutrons?
32. Why are there neutrons?
33. And why must deuterium atoms exist?
34. Why is the mass of the proton exactly what it is?
35. Why is the mass of neutron exactly what it is?
36. Why is the neutron not anywhere near as stable as the proton?
37. Why are protons so stable?
38. Why is Hydrogen stable?
39. What is the role of Helium and neon?
40. Why are they different from Argon and Krypton?
41. Why are the life-supporting elements abundant?
42. Why is the universe expanding?
43. Why are elementary objects spinning?
44. Why is the speed of light what it is?
45. Why is there no matter as such?
46. Why are quanta not particles?
47. What are elementary particles actually?
48. What really are dark matter and dark energy?
49. What creates mass?
50. How can you unify the laws of nature?”

To clarify, the ‘third component’ referred to was described by Close and Neppe in 2014 and is an essential part of 9D-science. This is called ‘gimmel’^{11; 12; 13; 16; 51-54}. Gimmel describes a

massless and energyless ‘substance’, possibly the ‘vehicle’ or ‘agent’ of consciousness, that is in necessary ‘union’ with every stable subatomic particle. Without the ‘process’ of what gimmick does our world would simply not exist. ^{11; 12; 13; 16; 51-54}

Some even greater conundrums:

Neppe then added some bigger level questions for this materialist:

- A. Please prove why it is *absolutely necessary to have a 9-dimensional finite existence* (which *contains* the 3S-1t physical reality we experience)
 - B. Please prove why it is *absolutely necessary for there to be a massless, energyless third component for a stable reality.*
 - C. Please show why the mass-energy volumetric equivalence in the normalized 9D reality with this third component is *exactly equal to the data in the CERN Large Hadron Collider?*
 - D. How could this be explained using only current materialist 4D science?
 - E. Please explain when *another calculus* (not Newtonian) is applicable.
 - F. Please provide *mathematical and empirical proofs* for the 50 items listed above.
 - G. Please explain how you can extend science beyond Popperian falsification. When would that be applicable and how is it done today?
 - H. Please describe for me a mind-body model that is *not* separating mind from body and is *not* just “*consciousness is more than just an emergent property of the neural system component of a total body system that only becomes conscious through learning within the womb and subsequent to birth.*”
 - I. If mathematical proof, combined with empirical data such as the LHC correlations were demonstrated, would that be scientifically unsupported stuff that does not enhance our knowledge?
 - J. Why do you think that TDVP disagrees with you “*about no grounds whatsoever to separate consciousness from the material world*”? Could it be that our ‘material world’ is based on incomplete knowledge as listed by the 50 questions above? And could it be that consciousness is not a separate dualistic component (as you point out)?
 - K. How do you explain other conundrums like Heisenberg’s uncertainty principle, so-called wave-particle duality, and the origin of the Universe (the ‘event horizon’)?
- These questions, with great respect, simply cannot be solved using the Standard Model of Physics as currently applied.” Yet, TDVP and 9D+ science provides feasible explanations.*

Plato’s analogy may be apposite:

The Greek philosopher Plato in his work *Republic* (514a–520a) presented his famous Allegory of the Cave. ^{55 56}. Neppe condensed this: ⁵⁷

Let me show in allegory how far our nature is enlightened or unenlightened. The truth may be nothing but the shadows of images. If told this were an illusion, would Man not fancy that the shadows he formerly saw were truer than the objects now shown to him? He will take refuge in the shadows which are clearer to him than the truth. Is it not possible that the shadow Man sees is his physical reality alone?’

Moving to the 9D reality and gimmel: Part 2.

Vernon M. Neppe MD, PhD, FRSSAf, DPCP(ECAO), DSPE
and Edward R. Close PhD, PE, DF(ECAO), DSPE

With respect to the 4D scientists, we (Neppe and Close) have provided the data to solve these questions by TDVP. Effectively, once one introduces specifically the 9 extra dimensions, infinity which embeds these 9 dimensions, and consciousness linked with everything (the “God Matrix”¹⁴), suddenly the solutions to these previously insoluble conundrums become easier: We cannot solve a 9D puzzle through 4D alone.

Vernon Neppe gave a clue to his materialist colleague: *“TDVP solves every one of these questions. In every instance a jumping point is the mathematical proof, usually combined with our limited empirical knowledge of today—like pieces of an incomplete (likely 3-D) jigsaw puzzle. Would that change your view at all?”*

Certainly most of these answers are reflected in what many experts in the area have regarded as ‘earth-shattering’⁵⁸ when they examined individually or collectively any of the Neppe-Close discoveries referenced in their 2017 paper on ‘*Fifty Groundbreaking Findings*’. Gimmel^{15; 16; 53; 59-62}, 9-dimensions⁵⁸, infinity^{24-26; 28; 63-65} and the associated unions of mass-energy and consciousness content^{12; 59}, of tethering of space-time and consciousness extent,^{11; 63} and the unification of all, as in Unified Monism^{66; 67}, is with respect, literally changing our thinking about reality.⁵⁸ So, for example, let’s briefly examine two of the above 50 questions asked by Neppe of the 4D scientist. We do not want to critique greatly and diminish such excellent Nobel winning research. Yet, sometimes changes are needed, or models are incomplete and the original Nobel work was based on 4D not 9D models. We respectfully asked:

Why might gluons not exist? and What can replace the Higgs Boson? Perhaps the answer might be “applying 9D or 9D plus science instead of the incomplete 4D science?”

The gluon problem

We know from the TDVP research that ‘gimmel’, itself a virtual particle, is in necessary union with all stable particles.^{11; 12; 13; 16; 51-54} Contrast this with the theoretical virtual particles called ‘gluons’^{68; 69} which Nobel Laureate Murray Gell-Mann^{70; 71} postulated is necessary to allow appropriate mass for nucleons through strong electromagnetic carriers that bind quarks together. Gluons have been regarded as necessary to explain the mass of the atom and why the quarks of protons and neutrons stick together (like ‘glue’ as in ‘gluons’).^{68; 69} That was a wonderful idea and solved a problem for the neutrons and protons. It fitted the 4D-Science model well. However, unfortunately, Neppe and Close have *mathematically demonstrated* that the current concept of gluons is refuted in 9D science.¹⁴ This is because gluons are not in union with electrons and therefore by math, this *regretfully* cannot work out as gluons alone, as hypothesized, would produce unstable atoms mathematically, and the atoms would

simply fly apart. Yet, they remain together. A great physicist-mathematician, David Stewart PhD, who has possibly studied TDVP more deeply than anyone else, has pointed out how profound a paradigm shift this is. Why? Close and Neppe have proven mathematically that gluons simply cannot exist as currently described in the SMP¹⁴: The *great problem* is that gluons remain in the nucleons, but they are not linked with electrons. This *mathematically means that that the atoms would effectively be unstable¹², and ephemeral.^{16;14;15} They would 'fly away'. Our world could not exist.* We've listed important technical data in the footnote.⁶

Could gluons then be modified to include the electron? Is that not legitimate as science advances usually via its errors, and a superb idea like gluons should remain, surely? Unfortunately, gluons could not easily be incorporated into electrons, because *the function of gluons relates to 'strong forces' and gluons, in effect, act as strong 'glue' for the nucleons.* This contrasts with electrons which in the SMP involves 'weak forces', and do not need to be glued to anything, just rotate round the nucleons. Also, how and why would gluons attach to the electrons? But let's imagine that gluons *were* in union with electrons: If so, then they would not anymore be simply a glue! They would also not logically be associated with the strong forces, the other property of gluons. Instead, gluons would effectively become the equivalent of 'gimmel' because they would teleologically require gimmel's properties to exist, namely, functioning substances in union with nucleons and electrons as volumetrically vortically rotating particles in 9D.^{22, 21, 72 f 22; 72} *Unlike gluons, gimmel don't glue quarks! They don't need to. They work with rotating particles over 9D.* Our finite laws of nature require everything to be *quantized and volumetric*. We don't exist as points (0D)—e.g., a singularity, or as lines (1D)—linearly, or in cross-sections as in planes (2D): those represent

⁶ Effectively, we have previously elsewhere derived figures in TRUE for quarks and electrons and the amount of balancing gimmel for both. That calculation derivation was painstaking and complex, but consequently now, it's easily reproducible. *Any calculation of atoms has to be integral as we cannot have a fraction of an atom.* We know, too, that *our calculated derivation is empirically correct* as we've demonstrated that our TRUE calculations correspond *exactly* with the mass-energy equivalence *normalized* data in the CERN Large Hadron Collider. We apply the principle that *empirically everything in finite nature is volumetric and quantized*. Consequently, we calculate values easily by applying cubic exponents, using Diophantine calculations. In the *existing* quantized finite reality, the atom should be symmetrically stable axially and the protons, neutrons and electrons must also be *integral volumes*. When applying these calculations with gluons (linked with quarks only), the atoms turn out to be unstable mathematically as the resultant cube root *cannot* be an integer. This is because gluons are applied *only* to neutrons and protons—only 2 volumetric atomic components: Fermat's Last Theorem (e.g., $a^3+b^3\neq c^3$) precludes integers so that fails by math. There needs to be a new virtual particle added, but it cannot be gluons because that instability would still then happen with just protons and neutrons. Yet, we cannot apply gluons to electrons (with a 'weak force') because only the nucleons (not electrons) require the 'strong' force 'glue' of gluons. Consequently, applying TRUE derivations, the *atom calculation can never be integral*. With gluons, where y is an integer reflecting the number of protons, in, for example, any 'life elements', the calculations reflect exactly the cube root of $68,697y^3 = 40.995338y$ (that's not an integer). This contrasts with applying gimmel in the derived TDVP TRUE 9D mathematical calculations: In this instance, there is a necessary third subatomic particle—electrons—and that means that with a necessary addition of a specific finite quantity in union with all the 'neutrons' (protons, neutrons, electrons) there would be a small number of solutions in these cubes. That specific quantity reflects gimmel: With *all the life-elements*, for example, the atomic cube remarkably *always equals* $125,971,200y^3$. Therefore, the cube root = $108y$. This means that adding gimmel, *the figure is always an integer*: This figure consistently reflects *all the stable elements of life* with integral quantities of protons, neutrons and electrons. However, such solutions would be impossible without the addition of six consistent different derived amounts of *gimmel TRUE units* (2, 4, 1 with quarks in protons; 5, 3, 6 for quarks in neutrons) in union with the (stable) 3 up-quarks (2 up-quarks in protons) and 3 down-quarks (1 'up' in neutrons); however, the further *much larger* amount (105 gimmel units) in the electrons, allows the specific elements to exist with *quantized volumetric stability*. This also, in part, explains *the Periodic Table Of The Elements*. Gimmel, specifically, allows our universe to exist: without it, the atoms would fly away. In effect, gimmel with specific GTUs provides stability; gluons cannot provide such stability.

^f 9D rotating gluons would then have the key properties of gimmel, and so effectively would be 'gimmel' not requiring 'glue' or the strong 3S-1t force but angular momentum rotation. This would be the required component of atomic stability. Yet, gimmel does not need to 'bind together quarks' like gluons. All atomic 'particles' are vortical and rotating through 9D angular momentum. This also explains spin in physics through 9D rotations from dimensions numbers 1 to dimensions 9 (4 complete 360° rotations of e.g. 3 quarks of 12 rotations allowing 1/2, 1/3, 1/2 or 2/3 spins).

mathematical operations only. All real objects have volume (3D).

In effect, we know from the TDVP research that gimmel is *in necessary union* with all stable particles, otherwise those particles, too, would be mathematically unstable. Whereas previously this could have been regarded as just theoretical, the Close-Neppe demonstrations of Triadic Rotational Units of Equivalence (TRUE) and the demonstration of their empirical viability by the Mass-energy equivalence normalized data in the CERN Large Hadron Collider, unfortunately makes the current gluon hypothesis, as it stands, untenable.^{12; 60; 73; 74}

However, it once again confirms the gimmel TRUE unit, 9D science model.

The Higgs Boson dilemma

Gimmel also contrasts with the Nobel-prize winning and, at the time, groundbreaking discovery of the Higgs Boson, at one point facetiously (?) named ‘the God Particle’^{75; 76} by Nobel Physicist Leon Lederman⁷⁷, despite the Higgs Boson not reflecting anything spiritual. The Higgs Boson is another postulated virtual particle. But the link with TRUE is far less direct: The Higgs Boson bestows mass, too, but appears problematic, possibly, because it’s so ephemeral (not existing beyond 100 septillionths of a second), and with gimmel may be redundant because gimmel would serve this function just as well. How would such an ephemeral concept work in our real world, and where does it fit in?

Gimmel

In contrast, gimmel is not ephemeral, but real and necessary and allows for all particles—including the six enduring quarks and the electron—to be stable. Without gimmel, no world would exist even temporarily.^{g 78} Gimmel is a sine qua non that we have refined and applied over many years. *The advent of gimmel, that promotes stability, labeled as the ‘God Matrix’¹⁴, may have just changed the particle soup that is unstable and created a need for a consciousness reflecting spirituality, ensuring the Laws of Nature run smoothly, and demonstrating how fundamental the mathematics is to the very existence of the universe.*^{11; 12; 13; 16; 51-54}

The life elements

As a further example, when analyzing the properties of the elements and of related gimmel, Close and Neppe have definitively demonstrated that what they call the most fundamental ‘life elements’ namely, C, H, O, S, N (spiritually with the acronym ‘CHOSeN’ which are the contents of spices in holy temples⁷⁹) plus two other critical ones Mg and Ca, plus the noble gases Helium and Neon. Predictably each of these elements have more proportionate gimmel than any other elements.^{12; 22} Because Hydrogen is without a neutron yet very stable, it is profound in its gimmel proportions. The rest of the life elements have *exactly* the same proportion of gimmel to ‘Triadic Rotational Units of Equivalence’ (TRUE)^{12; 22}, with

^g Interestingly, this formulation of gimmel has some similarities to the model of a very astute Israeli Dimensional Biopsychophysicist, Dr. Adrian Klein. His theory involves a complex but detailed subquantal formulation of an ‘*informational domain seen as a hyperdimensional superimplicated field for matter/energy domains*’. As this hyperdimensional coupling occurs beyond 4D physics and makes sense only in the 9D science, the term “stability” (a time-related condition) falls short of defining ‘*gimmel’s relational aspect to matter reflecting an unending permanence in the finite reality.*’ This is as gimmel reflects the infinite continuity, whereas Klein’s subquantal domain applies infinitesimal calculus: The problem is that that Calculus of Newton and Leibniz approximates only in our proven quantized finite reality.

specific TRUE unit scores of these life-elements based on their mathematical Diophantine equation figures all being multiples of 108^3 . Water, too, as a molecule, fits this profile.¹² Even silicon has these properties, and it should be a life-element. This is very likely correct based on the available data and a finding that directly is now testable:^{12; 22} Silicon is a part of the soil which supports elementary agricultural life.^{80; 81} In addition, TRUE shows phosphorus though not a life element⁷³, is a critical energy source.¹²

Moreover, applying TDVP and TRUE, we can appreciate why iron contains the most gimmel of any common element. These findings individually and collectively could be very big breakthroughs with far reaching consequences in the near future. It may clearly distinguish life elements from non-life elements of the periodic table.¹² The latter ones still are important, though, and might be contributing towards the entropy increase in the atmosphere, in the life supporting system and even act as catalysts.^{54; 12} Is this all coincidental? Or could it be part of a Divine design for the universe where exact amounts are needed for our existence?

4D, 9D and related complex questions

Moreover, there are complex questions relating to 9D not 4D science:

- Why is it absolutely necessary to have a 9-dimensional finite existence (which *contains* the 3S-1t physical reality we experience) and why it is absolutely necessary for there to be a massless, energy less third component for a stable reality?
- And how one can prove that the mass-energy volumetric equivalence in the normalized 9D reality with this third component is exactly equal to the data in the CERN Large Hadron Collider?
- Why is the observable reality basically discrete in nature and not continuous?
- When is another calculus of distinctions (not Newtonian) applicable?
- How can we extend science beyond Popperian falsification? When would that be applicable and how is it done today?^{82; 83}
- What kind of mind-body model that is *not* separating mind from body and is *not* just *an emergent property of the neural system component* could exist?
- We must explain other conundrums like Heisenberg's uncertainty principle, so-called wave-particle duality, and the origin of the Universe (the 'event horizon').
- Many studies now recognize the observer has to be an active entity. For example, the role of the observer is important and well-established in quantum physics, and cannot be ignored.⁸⁴⁻⁸⁶ Our experiences vary as observation is *relative*¹⁷ to the *framework* of the observer, and these variations recognize reality differently.^{23; 87; 88}
- And possibly most important: How does spirituality apply to the broader 9-dimensional quantized (little bits; pixilated; discrete) finite existence?
- Is that broader finite, with covert (dimensions 5-9) and overt (dimensions 1-4; largely our physical 3S-1t experience) embedded within an infinite, perhaps divine continuity?

Again, we can largely solve all these questions, applying 9D science. We certainly do not know all. Ours is an ongoing exploration, so let's finish this section pointing out our limitations (we cite verbatim from a previous publication by Neppe and Close) ⁸⁹:

“ Acknowledgement of a Greater Reality:

This is told in all humility. In this paper, we present some remarkable findings. We refer to some of our work with sincere meekness. Below, you will read about colleagues who have studied our findings in detail, and regard them as more than groundbreaking, even paradigm-shattering. However, what has guided us? We don't for a moment think this important shift from the current paradigm of scientific materialism to the realization that reality is consciousness-based and spiritually driven are purely our own independent contributions. We know that, for us, it is the result of accessing higher consciousness realities.

For us, this paradigm shift has been a series of remarkable inspirations and sometimes epiphanies, with certainty about what is correct and with the logic and sequencing of each discovery providing further confirmation of what was discovered before. Many times Dr. Edward Close and Dr. Vernon Neppe have had the same independent realization at almost the same time, 2000 miles away, quite independently, and yet in a remarkably consistent manner. ⁹⁰

Could it be that the findings below might be considered remarkable—in the sense of following the laws of nature but in accordance with reality higher than our usual physical 3 dimensions of space in one moment in time—the present?

Are these telepathic insights from one mind? Are there guiding elements here? Is it purely us, or guidance? G-d? You choose. It is our opinion that we've been guided and inspired. We've been influenced. Could this be the creative spiritual expression of science at work? We don't know, but think” that to be so.”

Once more, we quote the great Arthur Koestler ⁹¹:

“The real achievement in discoveries... is seeing an analogy where no one saw one before... The essence of discovery is that unlikely marriage of cabbages and kings — of previously unrelated frames of reference or universes of discourse — whose union will solve the previously insoluble problem.” He further adds:... *“The principle mark of genius is not perfection but originality—the opening of new frontiers.”*

In our opinion, in Dimensional Biopsychophysics ^{92; 93}, there needs to be an extra component. Not only the insightful discovery, but the proof, and much of that should be mathematical. We believe, we have demonstrated this math requirement, at least coherently, and to an extensive degree enough to make a difference for almost every one of the questions above. That is exciting.

We can usually prove the hypothesis; and when we cannot, we can logically speculate, and then use that logic, fitting the pieces into the appropriate part of the jigsaw puzzle, and using that as the scientifically feasible jumping point for further studies.

The misguided, the cynics, the deniers, the scoffers and the innocent.

Part 3.

*Vernon M. Neppe MD, PhD, FRSSAf, DPCP(ECAO), DSPE
and Edward R. Close PhD, PE, DF(ECAO), DSPE*

There remain still the cynics or effectively a small number of scientists variably ‘deniers’ who do not like to extend changes to the Standard Model of Physics, ‘scoffers’ about the TDVP model that “*just cannot be correct*”, or the misguided who have been influenced by others or are just ignorant of their own ignorance.^{h 94} Many of these cynics are from the exceptional IQ groups. But that does not allow them to negate information without the appropriate mathematical proof: That refutation simply does not exist—the math is correct, and the empirical demonstration justified. *We encourage open-minded and well-considered skepticism.* That helps us to further develop our ideas more, to explain the difficulties noted by skeptics, and to understand the limitations of our own models. *Skeptics apply science.*

So let’s take some examples: These are important because we, like the many original pioneers of yesteryear that we’ve discussed, encounter these kinds of comments repeatedly, albeit from only a few individuals. We have previously chosen to ignore them, not wanting to embarrass anyone, hence we quote only anonymously. We want to be respectful and understand the complex conflicts, dynamics and misunderstandings that may have led to their misinterpretations. We truly do not want to hurt feelings, but we need to assert the correctness of our view, to educate, and to advance further knowledge.

This does not necessarily mean we are correct, but at this point in time, our model has not been refuted, and instead, has continued to be amplified with other proven hypotheses or with scientifically verifiable information. With respect, these adverse, unfounded comments reflect on the cynics, not on our work. However, these critics may extend beyond just materialistic denial, to other negative emotions or thoughts that include jealousy, incredulity, ignorance, resentment, misinformation, or perhaps even malice. *Our TDVP discoveries are threatening to those who have grown up and been trained only in 4D-science.* Even individuals demonstrating exceptional intelligence are not immune. They, too, have their limitations, and group influences also might modify their views. Some of the examples below might reflect innocence or inexperience, too.

- **1. “The Cabibbo mixing angle calculation is not rigorous enough”.**

As background, the Cabibbo mixing angle refers to an esoteric angle in particle physics. Prior

^h The term ‘pseudo-skeptic’ refers to someone who does not apply scientific methods, but instead rejects a discipline or information based on their prejudices. We have mainly applied the term ‘scoffer’ that Stan Krippner PhD, prefers, and ‘scoffer’ was originally proposed by Marcello Truzzi. Krippner’s ‘counter-advocate’ term has had mixed receptions so is not here used. We also have used ‘denier’, and ‘bigot’ but some might even be innocently unaware of the limits of their analyses. We all need to be cynical and skeptical, but fairly so, as open-minded skeptics. We welcome that open-minded scientifically-based skepticism though: That way, the true scientist who is appropriately trained, carefully analyses the broader context of data. Even Albert Einstein, the scientist not the dogmatist, was appropriately skeptical. He did not accept everything and recognized he needed to resolve paradoxes. That is the way of a true scientist: Looking at scientific data and making appropriate conclusions.

to our work, no-one had been able to derive its size. Many scientists over fifty years had unsuccessfully attempted to solve why it was the size it was: No-one could understand why it had to be the strange size of 13.04 degrees.⁹⁵⁻⁹⁸

The Cabibbo angle was not solved because, with respect, it required a 9D model to solve. This was our first definitive 9D TDVP derivation. Thereafter we were able to replicate the 9D idea repeatedly⁹⁹ with several other derivations.^{3; 100-102}

However, a graduate level physicist in a high IQ society, questionably remarked:

“The Cabibbo angle proof might be correct, but it’s not rigorous enough.”

But the author of this statement could not indicate why there was insufficient rigor in this proof that has now persisted, unrefuted for 5 years, and where the proof is heavily associated with mathematics, and confirmed by experts in the area.¹⁰³⁻¹⁰⁶ Probing further, the author acknowledged he had not even read, never mind studied, our book *Reality Begins with Consciousness: A Paradigm Shift That Works*.¹¹ Nor had he read the many hundreds of publications we’ve written in detail. Instead, he admitted he had only seen a layperson report on the Cabibbo mixing angle. He now requested more detail and wanted to send it to his University colleagues.

This kind of unscientific pontification is unfortunate: Nevertheless, we are fortunate that there are now 4 different major scientists in the disciplines of Dimensional Biopsychophysics or Particle Physics in 3 countries who’ve studied our TDVP work intensively. They are highly qualified and have publicly declared that, based on their critical evaluations, they want to nominate us (Ed Close and Vernon Neppe) for the most major scientific prize. They all may be wrong, and certainly corrections historically are not unusual in science, but their conclusions suggest support for our work. We are concerned, however, that the 4D scientists at the major university of this individual may not understand the full extent of our work: Have they studied our broader writings or Dimensional Biopsychophysics? Despite remarkable 4D science qualifications, are they yet 9D scientists? With due respect, that makes a major difference.

- **2. “Why 9 dimensions not 12? The math must be irrelevant or contrived.”**

A second high-IQ individual, with respect, historically a ‘scoffer’, a Master’s level physicist, wrote: *I want to tell people that you’re wrong: You must be fooling everyone. Why not just choose 12 dimensions and find something unrelated that ‘proves’ it? The math is irrelevant. It’s like a cult: We must tell all that there’s no basis to your work.*

The problem is if there truly were 12 dimensions needed, we might test it and try to prove it: Yet, though we might try, we would definitely fail because by math 12 dimensions are simply incorrect. Ironically, 12 is a multiple of three— everything in nature is volumetric and also of two squared, factors of 108 (for life elements). But math requires 9 finite dimensions.

With respect, TDVP is not a cult: It’s justified 9D science involving a paradigm shift that

works. However, the sarcasm based on the quotation, and the context of this with his other statements, was clearly the intention here to sabotage detailed authenticated work: Could that limitation, respectfully, possibly be through his own ignorance? Or through his own limitations? Is he masquerading in any of fixed, ignorant, unalterable, bigoted, ineliminable religious ‘denierism’ that could be styled ‘incomplete dogma with unchangeable beliefs’?

Answers that count! Let’s objectively answer to these critiques scientifically:

- It is now a *fact* that, based on empirical mathematical data, there *are* nine rotating dimensions (or maybe exponents like 81) in finite reality: Period. Every major finding in TDVP began by applying logic and possibly some creativity, and we have indicated, the 9-dimensional finite rotating model is now definitive and mathematically proven: Moreover, the math is easy to prove. Whether we like it or not, we are dealing mathematically with a 9D quantized finite reality, and that reflects our *finite existence*: the 4D 3S-1t physical reality we *experience* is simply the *overt* component that is expressed to us during our physical existence. The remaining dimensions are *covert*.
- It is further a *fact* that based on examining data in the protons, neutrons and electrons of each and every element, for example, they cannot mathematically exist within stable atoms, unless an extra component is added—this is that additional aspect, ‘gimmel’. Without it, the mathematics of the atom would be such that we would have only a fractional proportion of the atom, not the whole atom. That cannot be, because, by definition, the atom must be integral. There is something missing and that something, gimmel, can be applied by mathematical 9D science not through 4D science.
- It is a *fact that 9D is highly relevant to empirical science today*. The only question would be the relevance of 9D science: Could these just be mathematical operators, that are important mathematically, but of no relevance to the real world? Could this math of 9D science not be empirically relevant to real science? No! Our data is unequivocally proven empirically.
- It is a *fact that we now have definitive math proof* linking our Triadic Rotational Units of Equivalence (TRUE) data with gimmel and subatomic particles with the multibillion dollar CERN Large Hadron Collider.²² The figures *exactly correspond* mathematically.^{22; 72; 73} That proves our work is definitely empirically based, our findings are real and necessary, and that includes gimmel.²² This is why it can no longer just be regarded as a mathematical operator that is irrelevant to our reality.^{60; 74; 107} This is our most important discovery culminating in 2018, as this proves that TDVP is not just scientific speculation.^{22; 74} Effectively, this implies that gimmel or higher consciousness has been scientifically proven! We challenge anyone, *after appropriate training not just cursory analysis*, to refute this data and specifically to show the mathematics is incorrect.
- Moreover, our cosmological data is apparently also correct: The Hubble ‘dark matter—dark energy’ data¹⁰⁸⁻¹¹¹ amazingly correlates at the <1 in 1250 level with TRUE data!⁶² To boot, we’ve shown that Dark matter-Dark energy further correlates strongly with quantal atomic studies.¹¹² With great respect, the facts are against ‘scoffers’ and ‘deniers’. Given that we’ve demonstrated that TDVP is not just a ‘theory’ (like string theory is), but based empirically on

fact at all of the quantal, macroreality and cosmological levels, it might now be incorrect to call TDVP a likely ‘*Theory of Everything (TOE)*’, but a ‘*Description of Everything (DOE)*’! Nevertheless, we dislike the term ‘TOE’, as we haven’t yet described, for example, Quantum Gravity or Unifying the Laws of Physics. So we’ll stick with ‘metaparadigm’!

- **3. “All of TDVP must be wrong! Let’s slay the dragon from a finger-prick.”**

We encountered a third unfortunate individual, a gifted and creative mathematician who incorrectly generalized across to a whole paradigmatic model from an irrelevant sentence: This could simply be an example of inappropriately applying the scientific method, or possibly being influenced by another colleague who did not know any better.

The example this time was a tiny response to laypersons about a largely irrelevant question: whether an angle of spin could or could not be 120 degrees.¹¹³ The author correctly focused on that one largely irrelevant comment—not germane to the whole discussion—in a hundred page document in one of our simplified dialogues that gave a tentative, speculative, theoretical answer.¹¹⁴ Even if our comment had been definitely wrong, the comment was irrelevant (and incidentally, one option in our answer could have been correct anyway). However, the author spoilt his excellent computerized analysis jumping to a major conclusion that our whole model of TDVP was refuted! Effectively he was writing: “*Oh here’s one little thing, it doesn’t have to be like this, but I conclude from that that everything you’re doing must be nonsense: TDVP must be refuted.*” This example illustrates the unwarranted extended conclusion by analogy: Metaphorically, miskicking a soccer-ball a half an inch instead of the full 100 yards of a football field should not categorize that miskick into conceptualizing that the whole field must be faulty.¹¹⁴

Clearly, we should maintain priorities and perspectives in conclusions, and we must make appropriate justified conclusions from specific examples. Refutation requires testing a relevant hypothesis fundamental to a model or applying other logic for new ideas. We must obtain a proper perspective of the relevance of a single grain of sand in a vast beach. We must avoid taking something out of context:

It’s like: “*This isn’t correct, so everything else is wrong. Let’s find one little component—a prick on the finger—we don’t agree with, and then slay the whole dragon*”.

Unfortunately, sometimes misguided scientists just don’t look at the whole picture.

- **4. “Why bother?”**

Another example happened with an eminent PhD physicist scientist: “*You don’t need to show in your paper the square root of an imaginary number is imaginary because it’s obvious, and someone else has shown that before anyway.*” So he concluded:

“*Why bother to look at the rest if you thought that needed to be listed. It’s so obvious.*”

Clearly, this is irrelevant logic and out of context. For him, it was obvious. But when we replied that others might not have known this and asked for the math proof, he responded:

“*Oh well, you’re not supposed to be commenting on me, we’re looking at your work*”.

It is easy to condemn, even by innuendo. But that does not make for truth or objectivity.

- **5. “None of our group believes this work!”**

We asked this author about the basis of this remarkable statement. He denied having said this, and did not want to be named. We have taken his denial at face value, because a scoffer might have found benefit by misquoting him. So here was a highly intelligent, creative, non-scientist, influential in his peer-group, having his claims misquoted by others. He further admitted he had no scientific training in this area, and had also not studied articles on TDVP. But he felt he had certain skills and “*I intuited your 9D work must be wrong, because I ‘see’ everything 3-dimensionally*”. Ironically, 9D science involves 3D volumetric phenomena, and this actually would agree with his ‘intuitions’ because he was “superb at conceptualizing 3D shapes.” However, in most areas of endeavor, scientists who critique specific research know the discipline very well. They are experts who have read the broader literature, and studied the key information in detail: We expect open-minded skeptics of TDVP to be so qualified.

- **6. “Professor of Physics or Dimensional Biopsychophysics expert?” A caution.**

“I will send the article to my Professor. He will decide the value of this work.”

This is a common and apparently appropriate comment, but it’s worth a cautionary note. To be even a top-class academic Professor of Physics in 4D science, who may or may not be super-specialized, does not make one a Dimensional Biopsychophysicist in 9D science. Even the greatest 4D physicist is not necessarily capable of expressing an appropriate opinion on TDVP until educated in the area: *The most respected 4D scientists may not even recognize their limitations in studying and evaluating the multidisciplinary TDVP data or other proposed theories of everything.* Effectively, different expertise may be needed to study 9D+. We note that even exceptionally intelligent individuals still require thinking out of the box¹¹⁵⁻¹¹⁷: Creativity appears to be a separate attribute to convergent intelligence.^{90; 118} Being 3 SD above the mean in IQ, does not make one omniscient, nor necessarily exceptionally creative. Only some scientists originally trained in 4D thinking can make the creative 9D jump, and possibly only those with an open mind can succeed in multidisciplinary studies.

Distinguished interdisciplinary individuals who have made the creative jumps.

Any creative jump requires work. These can be to 9D, 9D+, *or any other novel discoveries.* We pay homage to current exceptional Consciousness scientists and original thinkers such as (alphabetically) *Doctors Larry Dossey, Joyce Hawkes, Len Horowitz, Alan Hugnot, Brian Josephson, Adrian Klein, Stanley Krippner, Jeffrey Mishlove, Surendra Pokharna, Dean Radin, Gary Schwartz, Rupert Sheldrake and David Stewart, plus Peter Davenport, Stephan Schwartz and Russ Targ.* Most comment only on their strengths, and are not 9D+ experts. However, they’re exceptional in *their* areas, and have spent thousands of hours of multidisciplinary, intense, integrative studies to conceptualize their *various and different* challenges across their several, divergent disciplines. Each of these scientists have distinguished themselves internationally with wisdom, originality and creativity, knowing and understanding, and across many avocations, so that they could pioneer new ideas, and genuinely contribute much to mankind.

Nevertheless, *we cannot start as specialists in everything*: For example, Vernon Neppe MD, PhD (Med), a Fellow of the Royal Society (SA), originally was a neuropsychiatrist, forensic specialist, psychopharmacologist, psychiatrist, and physician. Yet Dr. Close guesstimates that Neppe has spent far more time than many mathematical-physics PhDs in updating and honing his skills in math-physics. Doctoral studies are necessarily specialized, and, in this instance, Neppe's additional education has been in the Dimensional Biopsychophysics (DBP) direction. Similarly, Neppe's co-researcher, Edward Close, PhD, mathematician, physicist and environmental engineer, too, has necessarily extended his erudition in the philosophical, biological and psychological domains. Both further applied their creative and logical thought to ensure developing and learning the complex language, concepts, ideas and lateral thinking in a new specialty. Mastering all of these areas is a challenge for any individual scientist. This is one reason why Close and Neppe have, by necessity, synergistically worked together.

A pertinent example here of such new thinking is the new 9D+ discipline that we (Neppe and Close) have called 'Dimensional Biopsychophysics' (DBP) because it incorporates physics and chemistry certainly, but also consciousness research^{12; 35; 63; 87; 119-126}, dimensionometry and extra dimensions^{92; 127-134}, mathematics^{135; 136; 137}, Gowers, 2010 #421; 138; 139 and particularly Edward Close's the 'calculus of dimensional distinctions'^{22; 140-143}, plus the biological, medical and the psychological sciences¹⁴⁴⁻¹⁴⁷. Add to this the many philosophical, mystical and spiritual,^{89 32; 139; 148-152} disciplines and the interdisciplinary challenge is formidable. We believe that effective mastering of TDVP fully requires the minimum *equivalent* of an extended, high-intensity Master's or Doctoral interdisciplinary program in these several specialities.

Who are the misguided ones?

With great respect, we are left wondering who the misguided scientists are? Are they the non-creative scoffers who have rejected the new? Or us (Close and Neppe). With respect, we found the fish that fell through Eddington's metaphoric net.³² We recognized there's more to reality than 3S-1t. What metaphoric fish were discovered? Essentially 9D and 9D+ (with infinity): After 7 years, no essential, fundamental or key component of our TDVP model has been refuted. This is very unusual in science, particularly today. Instead, with each finding the TDVP model grows stronger. We hypothesize, test, and confirm: It's like putting gloves onto many hands; each time they fit. This may not be too surprising, because the fundamental axioms on which TDVP are based appear to be correct, so the logic and discoveries follow.

The landmark justifications of change: Exploring our 2018 findings.

Even though Neppe and Close cogently argue they are correct, let them prove it: That's now easy. The TDVP justification is our demonstrated Mass-energy equivalence normalized data in the CERN Large Hadron Collider paper combined with another ostensible landmark paper, our integration and possibly the first unification of the magisteria of spirituality with science.^{89; 153} These make an important 2018 duet, though many key features developed far earlier,¹³⁵⁻¹³⁷ and both were works in progress over many years⁸⁹ (see VernonNeppe.org/presents).

The Neppe-Close TDVP research is, with respect, *the* extraordinarily game-changer. It might describe the missing links: A key, important landmark discovery is ‘gimmel’, the massless, energyless, third component of reality, that may be key to science in both 9D and the infinite.

Gimmel in the 9D finite: Gimmel is in *necessary union* with all stable particles. But for Gimmel to make sense in the finite reality, it must be in the nine-dimensional quantized reality context.^{12; 15; 16; 51; 52; 54; 59; 61; 62; 112} The concept of gimmel appears to have changed the nature of stable particles¹¹³ because these subatomic particles can exist for extended periods: The proton¹⁵⁴, for example, apparently has existed in stable form for as long as the age of the universe!^{22; 74; 114; 154} Gimmel has allowed us to understand the need that was *created for stability of particles*. Conversely, the insufficiency of gimmel may be the major reason why the vast number of mathematically unstable, ephemeral particles exist just for ‘moments’ (such as 10^{-7} to 10^{-21} second)⁴⁷ in the so-called ‘particle soup’.^{155; 156} The hypothesized particles in the soup appear unstable because mathematically there is insufficient balancing gimmel. We speculate that gimmel may not only reflect a finite measurable mathematical quantitative *extent*, but a non-quantifiable, infinitely linked *content* quality reflecting consciousness.^{22; 140-143} Gimmel *impacts* everything and that allows dynamic, interactive functioning with all of finite physical reality. Gimmel is virtual, and it *may be a necessary though not sufficient* requirement for permanence at every level of nature (some mass-energy facts may exist, too). We quote Dr. Pokharna⁸ again: “*We cannot have any particle, tiny or macroscopic or in our astronomical reality, without what is called ‘gimmel’—Neppe, Close and I and others regard gimmel as consciousness, or its vehicle as there is simply no other explanation ...*” “*Neppe and Close have provided the data to solve complex questions by TDVP. Effectively, once one introduces extra dimensions, infinite continuity which embeds the 9 finite quantized dimensions, and consciousness/gimmel—“the God Matrix”—with math proofs plus unified reality as key points, the solutions for all finite reality become easier. This is why their TDVP model—unlike any other scientific model based on the Theory of Everything (TOE) criteria analysis—works, and why TDVP so closely reflects and encompasses the spiritual aspects.*”

Gimmel in the infinite: Ordropy, life and the conservation of mass, energy and gimmel: Reference to the ‘*infinite*’ is very important in 9D+: ‘Stability’ in subatomic particles might still describe a *finite*, time-limited, but extended impermanence. But at the *infinite* continuity level, the term ‘stability’ appears insufficient because *gimmel provides an infinite endurance that would persist forever*, as reflected in our recently verbalized ‘*Law of Conservation of Mass, Energy and Gimmel*’.^{22; 72; 73; 61} This never-ending conservation links strongly with our concept of ‘*ordropy*’^{11 24-26; 28; 63-65} — *the tendency to infinite order that continually impacts the finite at every finite dimensional level*. We propose that ordropy likely arises from the infinite, and impacts the finite through gimmel: Our finite physical 4D life and our infinite immortality reflect fundamental ordropic properties. Any impermanence of finite subatomic particles results from the subatomic particles themselves, e.g., the short half-life of the free neutron (<5 minutes), not gimmel.^{72; 114; 157-160} Gimmel is necessarily intimately linked with a broader, ubiquitous consciousness *radically reshaping science with spirituality*.^{92; 22; 72; 73; 61}

Speculation versus Proof: Part 4.

Vernon M. Neppe MD, PhD, FRSSAf, DPCP(ECAO), DSPE
and Edward R. Close PhD, PE, DF(ECAO), DSPE

LFAF— ‘Lower Dimensional Feasibility Absent Falsification’ is key

All these areas are not only addressed in TDVP, but legitimate explanations based on empirical data, logic and mathematics are applied. However, we’re careful to differentiate *speculation from proof* applying our model of Lower Dimensional Feasibility Absent Falsification—LFAF. ^{34; 150; 161-163}

Relevance of LFAF in the sciences

LFAF appears to be a truly remarkable contribution to the Philosophy of Science. It recognizes what is scientifically feasible, but not falsified. LFAF is so fundamental to the scientific approach that it can be applied every day, and also in disciplines like cosmology, evolution, quantum physics, Medicine, Social Sciences, Forensics, Psi, and Consciousness Research. LFAF completely changes science ⁵⁸ and allows for alleged “theories of everything” (TOEs) like TDVP, too. And LFAF is a profound new paradigm for the philosophy of science, and should, with great respect, become the standard way that we now measure science.” ^{34; 150; 162; 163} And most importantly possibly, it allows spirituality to be feasible and to enter the world of science!

Relevance of LFAF in higher dimensions

LFAF also allows understanding of how higher dimensions of reality may be incompletely registered in the lower dimensional reality (e. g. 3S-1t). Their feasibility can be tested metaphorically by placing jigsaw puzzle pieces into the correct spots, and this extends science by amplifying the jigsaw further. Such feasibility without being falsified is very, very common—an everyday occurrence.

Jumping to the covert dimensional domains

Neppe has cogently emphasized these and related insights.

“To the conventionally trained scientist, anything which does not fall into our overt physical four dimensional domain experience (three of space within a single time dimension) does not exist. It is consequently treated as ‘unscientific’, ‘absurd pseudoscience’, or ‘speculative metaphysics’ or ‘third-rate mysticism’.

The truth is just the opposite: Recognizing the true compass of feasible reality allows the real scientist to easily mathematically solve puzzling paradoxes and to empirically appreciate unexplained conundrums. This includes understanding the covert extra dimensional expressions that the finite 5th to 9th dimensional domains allow for—consciousness, spirituality, and the further extra two dimensions of time. Moreover, these materialistic scientists must also recognize the infinite, too.” ¹⁶⁴

4D science is contained in the 9D science

Everything we've learnt in the macro-world particularly is included in TDVP: Our physical reality including 4D science is also well-substantiated through the TDVP model of 9D+ science. We must recognize that despite physics Nobel Laureate Richard Feynman, the layperson's physicist, popularizing that we must accept the norm³⁸ that 'quantum physics is simply weird', in 9D science quantum physics as well as cosmology is *no longer weird anymore* and actually obeys the same laws of nature as our macrophysical laws. The Laws of Nature are uniform for all of science.^{11; 59}

John Wheeler's suggestions for research:

The great theoretical physicist, John Wheeler PhD (Feynman's PhD supervisor) recognized this likelihood several times¹⁶⁵:

- In any field, find the *strangest thing* and then explore it.
- In order to more fully understand this reality, we must take into account *other dimensions* of a broader reality.
- Everything must be based on a *simple idea*. And it is my opinion that this idea, once we have finally discovered it, will be so compelling, so beautiful, that we will say to one another, yes, how could it have been any different? (Or the variant) Behind it all is surely an idea so simple, so beautiful, that *when we grasp it*—in a decade, a century, or a millennium—we will all say to each other, how could it have been otherwise? How could we have been so stupid?

Applying John Wheeler's research suggestions:

And so, with great respect, Wheeler's quotes are apposite. We've discovered solutions to the strangest things. We've increased to other dimensions. We've applied a *simple idea*: We've *grasped* that shift from 4D science to 9D science, and our colleagues should have, too: We've applied simple ideas with normalization of volumes of quantum particles. This is why with 9D+ science conundrums like quantum weirdness, and dark matter and dark energy^{62; 112}, and even entanglement^{11; 166}, non-locality⁸⁷ and psi^{123; 167}, infinity^{65; 92} and even spirituality⁸⁹ and consciousness¹², and possibly even relativity and quantum mechanics¹⁶⁸ become easy to understand within the single 'unified law of nature'^{11; 62; 112} We have united the quantum, macrophysics, cosmology and even spirituality with the same natural scientific rules.

Moving from 4D to 9D science?

This should be so exciting for the 4D-scientist who finally will become 9D scientists. However, strangely, Eddington's "*bah*" still seems to apply³². Yet, it's all comprehensible and easy. *The mathematics is there and we have put it there for anyone to look and see.*

Yet, do we really still need those Planckian funerals⁴⁴? That would be unfortunate.

Do old habits really need to die out, even if they are obviously wrong? 4D scientist: please answer!

Our physical reality of 3S-1t that we experience, allows us to live our lives knowing there is predictable and often replicable order. However, TDVP also recognizes particularly those Standard Model of Physics limitations in quantum physics and cosmology and extends those. It also explains

a large number of other conundrums and fortunately demonstrates the mathematical bases to many of those because they require 9D+ not 4D science.

The alternative: Ignoring change

Currently, there is clearly a need for that paradigm shift. This is because the old standard Model of Physics (SMP) simply does not work in many quantum and cosmological contexts: Provided we ignore important covert influences on our lives like consciousness and infinity, the SMP still largely fits into our day-to-day macroscopic physical reality. But we might not want to, just as we do not ignore the fact that our earth is not really flat.

However, moving to the atomic particle level, for example, the idea of “quantum weirdness”^{37; 38} has become passé: In 4D science, we must just accept that quantum mechanics is just not very clearly comprehensible. And we must accept other obvious inconsistencies or unknowns, too, such as the many cosmological conundrums including what was there before the Big Bang¹⁶⁹ and others¹⁷⁰.

There are far more illogicalities than these inconsistencies. It might just mean that even though conventional scientists *think* they know everything, *they are missing a very large part of our reality!* But we need not accept any of that. We hope that the advent of the internet will allow us to beat the Planck alternative variant of: “*A new scientific truth does not triumph by convincing its opponents and making them see the light, but rather its opponents eventually die, and a new generation grows up that is familiar with it.*”⁴⁴ We want scientists now to learn 9D+ science!

4D science may still be applicable in our Triadic Dimensional Vortical Paradigm. *TDVP recognizes experiences in our limited perspectives of 3S-1t certainly, but it also allows us to integrate with our broader existence that is impacting us all the time.* However, 4D is insufficient to solve many questions: In Part 1 of this paper, we alluded to the more than 50 conundrums, mysteries and contradictions that the Standard (Reductionist 3S-1t) Model of Physics simply cannot answer. This appears to be because these conundrums go beyond 4D science: They’re insoluble with 3S-1t. But, the solutions to these conundrums can be found, in part or in whole, in 9D or 9D+ science.¹⁷¹ They then become scientifically feasible.^{34; 58} We need to still apply 3S-1t models at times, and this may be a reason why some solutions can only be *in part*. We can only apply our 9D+ jigsaw puzzle from the framework of our 3S-1t awareness. At times, the application of *suitable* 9D quantized math, such as Close’s Calculus of Dimensional Distinctions^{22; 140-143}, facilitates significant resolution.

An aside: We understand there are over a thousand full-time scientists studying areas relating to the String Theories¹⁷⁻²¹: With respect, their research has gone nowhere simply because the concept is based on false premises (e.g., no vortices, no consciousness, no infinity, not volumetric, no 9-D, no triads, no 3D time). Would it not be wonderful if some of these researchers instead joined Vernon Neppe and Edward Close in a TDVP endeavor that is ostensibly correct and is a critically important fertile discipline that can generate over six hundred testable hypotheses for future PhD degrees?¹¹

A new approach to the philosophy of science:
LFAF and 11 NCR. Part 5.

Vernon M. Neppe MD, PhD, FRSSAf, DPCP(ECAO), DSPE
and Edward R. Close PhD, PE, DF(ECAO), DSPE

Falsification versus feasibility

Conventional science argues that current science is based on the ‘Popperian theory of Falsification’.^{83; 172} This requires rejecting the false results, till true results are discovered. We need to add pieces of the jigsaw puzzle within 3S-1t. This way the open-minded appropriate skeptic can examine the data logically. Importantly, some paradigmatic models are incorrect and not feasible. If they were falsifiable, they could then be falsified using the correct approaches. But, most times, they are not falsifiable. What is new, is not necessarily better, so we must seek feasibility.

The introduction of our concept of ‘Lower Dimensional Feasibility Absent Falsification’¹⁶³ incorporates *feasibility* and therefore *pivotaly provides* scientific method in extending consciousness³⁴. This is so important because we can now extend the concepts of science beyond the purely limited falsifiability.

LFAF raises issues about interpreting evolution in a purely mechanistic way. It allows incorporation of the feasibility of Consciousness Research, concepts of theism with impact, higher dimensionality;⁸⁷ and psi into science not as pseudo-science^{123; 173; 174;} and it also facilitates studies of cosmology and even Medicine and Psychology.^{99; 175; 176}

Circumstances are rarely replicable—they cannot be repeated again and again at different places and times, failing the condition of repeatability in the realm of the modern science. Many psi phenomena fall in this category.^{167; 173} They cannot be treated as ‘scientific’ in the current Popperian definition of the modern science based on falsifiability from the framework of 3S-1t.^{150; 163; 177} *TDVP results in an extension of the modern science because it recognizes higher dimensions and that is where the major part of spirituality and likely consciousness exists impacting 3S-1t.* These can be impacted by altered states of consciousness, such as through deep meditation or near-death experiences.^{99; 175; 176} That might allow events to occur more regularly.

There might be no (totally) satisfactory definition of “science” as it does not always apply “the scientific method”. Even the quantitative “hard science” may be applied to an ostensible non-science because it is highly quantitative and technical. Additionally, mathematics appears to be a metalevel above science because mathematical proof is so definitive: Is it part of science? In a way, it is above science, removing all debates from what is true.

Kuhn's scientific revolutions and the Neppe-Close 11 NCR

Thomas Kuhn's theory of on the Scientific Revolutions of change encompasses a repetitive and ongoing cyclical transition that involves three stages, ^{178, 179} namely:

- normal science;
- crises when paradigm shifts are contemplated or recognized with new assumptions; and
- scientific revolutions when the paradigm alters after a qualitative transformation in theory.

Actually, it was not Kuhn, but the German philosopher, Arthur Schopenhauer ¹⁸⁰, who first articulated this central idea: *"All truth passes through three stages. First, it is ridiculed. Secondly, it is violently opposed. Third, it is accepted as being self-evident."*

We have extended the stages of the Kuhn model. ¹⁷⁸ We have proposed the "11 Neppe-Close Revolutions model (11-NCR)" of change—the reshaping of science—by adding several more paths along the way. That makes these stages more comprehensible as the detail otherwise has been missing with all but the three Kuhn stages.

Table 1: The eleven phases of denial and acceptance of Neppe and Close ("the 11NC revolutions" or "11-NCR")

1. Initially there is *"it's too wrong to be wrong"*, often accompanied with a condescending smile or chuckle; the alternative phrase is the derisive *"it's too false to be false"*;
2. then there is abject rejection, often accompanied by ridicule and name-calling: *"the insults are deserved. I know, I'm an expert"*;
3. then *"that's a good try, but it's simply not true"*;
4. then the consensus rejects it: *"it's definitely incorrect"*;
5. then it is unlikely, but it may be mentioned as a hypothetical for completeness: *"it's an unlikely outlier that we mention just to cover all our bases"*;
6. there is the stage of *"I'm opting out: This is outside my discipline, so I don't understand it or haven't studied it. Let me suspend judgment"*;
7. then *"maybe there is something there, but I need more"*;
8. then *"there is some evidence... interesting"*;
9. then *"it appears to be proven: the evidence is cogent; but most scientist don't accept that"*;
10. then it is hailed as *"it's a new breakthrough"* (even though it may have been proven much earlier);
11. then *"it's obvious: we all know that"*.

This results in eleven phases of denial and acceptance of Neppe and Close ("the 11NC revolutions" or "11- NCR") highlighted by stage 1 *"Not even wrong"*. ^{177; 179}

For example, in general, Kuhn's normal science incorporates the first 6 stages of 11 NCR.

Then Kuhn's crisis stage could roughly incorporate stages 7 to 9 of 11 NCR.

Then Kuhn's paradigm alterations related to stages 10 (when new) and 11 (when accepted) of

the 11 NCR. The spectrum ranges from individual utter rejection to complete acceptance. ¹⁷⁹

We exemplify this 11-NCR model applying 11 new sequences of discovery, and point to the prejudices of the scoffers. ^{177; 179} (Table 1) Of the 11 legitimate phases, individual scientists might be somewhat arbitrary as to which level of classification they would apply. Even attaining a consensus of scientists might not imply they are correct.

Metaphysical and 9D science

So how, then, can we apply consensus and peer review, and maintain a paradigm or specific knowledge as science? We, surely, must be careful that when using current consensus ideas, and rejecting feasibility, we regard the greatest contributions to science as “metaphysical” — implying they are not scientific, or simply philosophical, or sometimes involve creativity. We might then recognize, too, the irony. LFAF becomes an impetus for change to redefine experience in the context of identifying different levels of acceptance in this new science. Without applying LFAF, this might not even be perceived as a science at all and still simply remain metaphysical speculation or a philosophical standpoint, because we are then not going beyond 4D to 9D+ science. Yet, consciousness alone forces that option of 9D+ as we move out of the 4D science of 3S-1t alone).

Where do we stand? In our opinion, when so-called scientists write that “*it’s too false to be false*”, they’re saying a great deal. But this is not usually about the science behind the work they’re critiquing. Instead, it may reflect themselves, because with the speakers’ ignorance, or their unswerving rigidity, flows forth their character.

Evaluating the TDVP findings in sequence: Grading each milestone applying 11 NCR?

Let’s apply the 11-NCR classification to the example of the following sequences:

1. Close and Neppe developed their detailed TDVP ¹ model of the finite and the infinite. ¹¹
2. They then recognized in their TDVP model that there had to be a multidimensional finite reality. ^{27; 28}
3. They then postulated in their TDVP model that there had to be specifically a 9-dimensional finite reality. ^{11; 28}
4. They then demonstrated theoretically why there should be 9 finite dimensions. ^{11 103; 104}
5. They then mathematically derived the Cabibbo angle which required 9-dimensional spin. ^{106 105}
6. They then replicated this mathematical derivation by a thought experiment. ¹⁸¹
7. They then extended this work to other areas such as angular momentum and electron spin. ¹⁸²
8. They then extended several other related phenomena such as the non-spherical

¹ TDVP or TdVP: The Triadic Dimensional Distinction Vortical Paradigm

electron and the electron cloud.⁹⁹

9. They then postulated that each higher dimension is an extension of the previous ones: The lower dimensions are embedded within the others.¹⁸³
10. They then developed a model of the third property, gimmel, which shows that we need a 9-dimensional reality.^{12; 14}
11. The applied Triadic rotational units of Equivalence —TRUE units including quarks, electrons and gimmel.^{14; 62}
12. They showed correlations of gimmel, both sub-atomically as well as at the cosmological level, and that these relate to a particular way of measuring reality. (Triadic rotational units of Equivalence —TRUE units).^{14; 62}
13. They recognized that all these findings are heavily correlated with the commonality being a finite 9-dimensional spin model.^{88 87 99 177; 179}
14. They further pointed out that none of the 9D spin findings in any way compromised the experiential empirical findings that we have in 3S-1t.^{3; 101; 128}
15. They then moved from the mathematical and empirical scientific model to the creative exploratory model for the future. They realized that there are many more ways to solve the many conundrums in our current world view by applying this knowledge:
 - a. Through understanding there needs to be a spinning multidimensional reality (which also would refute²⁹ the String Theories¹⁸ which involve folding or curling, not spinning)
 - b. That certain other dimensional contradictions or conundrums of physics might be potentially solved in the future.^{12 184 185}
 - c. That mechanisms for psi phenomena can be solved without contradicting our current experiential reality.^{186 167}
 - d. That the reality might need to be 9-dimensions or a related exponent: 9 is 3 squared, and it could possibly be 9 cubed = 81, 9 quadrupled = 729, or possibly even 3 cubed =27.⁸⁸
16. They then definitively demonstrated the Mass-energy equivalence of TRUE in the normalized data in the CERN Large Hadron Collider.^{22; 72; 187}

Let's look at some of these 16 options including the four subdivisions of option #15.^{177; 179} How does the conventional 4D-scientist, very used to life being only 3 dimensions of space (length, breadth, height) experienced in a moment in time (3S-1t), regard such findings? First, he could regard each of the sixteen findings individually— #1 to #16, being perceived independently of any others.

Alternatively, he could build on the 16. Knowing that e. g. #5 likely implies that #1 to #4 is also correct.

Therefore, possibly there should be 3 rankings when we classify these 16 statements in the context of the 11 Nepe-Close Revolutions model (11 NCR). The rankings of the statement should lead to a particular level ranking which would be different for each scientist^{177; 179}:

- A. independent of any other statement;
- B. taking all the other previous statements into account yielding a composite;

C. rank the ranker's individual attitude for the above, not based on information delivered but attitude toward the areas (independent, composite, other). This ranking might say much more about the findings or the background (personality, training, ignorance) of the scientist involved than the actual findings.

We briefly go ahead and this may be particularly relevant for C. above.

- Level 1 would refer to the pseudo-skeptic, denier, or scoffer, of “too false to be false”?
- The mid-range may involve the considered opinion of Level 5, “unlikely outlier” because we're concerned about all other 3S-1t science, despite knowing that it does not contradict any of 3S-1t, just extends it—so that still requires some denial of the data?
- Or is it Level 6, the honest “*I don't understand it: This is outside my discipline*”.
- Or is it Level 9 “*proven? But most won't accept it?*”
- Or is it Level 10 (“*a new breakthrough*”)?
- And what would it take to be Level 11? Would it require the Planckian funerals⁴⁴ or has massive, rapid electronic communications changed that ethos?

Of course, adding “feasibility” to the mix might paradoxically lead to being stuck on Level 1 of 11-NCR for longer. Before it could just be rejected but not as science, so maybe as a Level 3 (“*good try, but this is not science*”) but now, for some, it might be classifiable initially as “*not even feasible, because of its ostensible Bayesian impossibility.*”^{167 11}. That may be why the Planckian Funerals⁴⁴, pointing out why advancements occur only over generations, are important. Scientists have difficulty with “*unthinking*”!

These 11 stages are not easy to negotiate because they are so threatening, and we can see this in areas where, for many, the evidence is cogent, such as in psi research¹⁷³, and yet for others the data is completely rejected, often out of ignorance.

Scientists might not easily admit variants of the following sentences: “*I'm too threatened by this. I want to stay with what I know. In any event, I must not need to unthink what I've learnt. And I'm an academic and my job is at stake.*” Instead, ironically, often those who shout the most about maintaining the status quo, are *ignorant of their own ignorance* about a proposed new paradigm. They've not studied the paradigm in detail, and likely might not even have the requisite training and experience even to make judgments.

We have seen this ignorant ignorance repeatedly in the disciplines of Psi and Consciousness Research, for example.^{123; 167; 173; 174; 188; 189} This is, at times, particularly ironic because with respect, we suggest a feasible unstudied conjecture:

Consciousness Research is so multidisciplinary that few scientists have been able to allocate even as much time to study this area as they would to a regular bachelor's degree in a recognized university discipline like physics.

Science is now subject to anonymous peer-review, yet this “*does not shield people from being jealous, opportunistic, self-serving, incredulous, or harboring idiosyncratic beliefs, nor does it ensure competence or ethical behavior.*”¹⁹⁰ We could add ‘ignorance of ignorance.’

Objective interpretation is indeed, a problem for all these reasons:

Acceptance of the new, may result in threats to current thought, and rejection may even result in misappropriation of ideas—we've seen referees publish data instead.

Also, acceptance of radical ideas might lead to rejection of the current University paradigm. Even in science, the new is dangerous and the expectation is to 'toe the line'. Recognition in science, like all endeavors today, frequently has significant political innuendoes.

These considerations certainly do not make conventional 'science' as a subject, necessarily into 'hard science'. Henry Bauer's parallel with economic data also being hard science¹⁹⁰ is exemplified here, as we see it: *Peer-review is a soft approach, often implying limitations that may be tantamount to the data being judged by a jury who are not really peers*—in most instances, different so-called peers will reach very different conclusions.¹⁷⁷ Some reviewers can back in their anonymity with unfair prejudices. As an important aside, Dr. Bauer's insights into the limitations of the scientific method and consequently, on Philosophy of Science, are extraordinarily important. Many have not considered them, and they might be at Level 1 through 3 of 11 NCR, when possibly they should be at Level 6 for some, and Levels 10 or 11 for others.^{190; 191} Yet, Dr. Henry Bauer might be an example of those who will have only contributed after the Planckian funerals in the Philosophy of Science.⁴⁵ His wisdom has been ignored, possibly because he has been prepared to be controversial in his views, as well.

Still peer review with appropriate reviewers generally makes papers much better. Neppe points out that every single one of his 700 plus publications have gone through rigorous review, and have been read sometimes by as many as 11 peers. This includes journals, such as this one, that usually does not have stringent peer review, but allows exposure to several peer reviewers, more than most peer-reviewed journals. The consequent improvements in the quality of the articles pays off dramatically—this particular has gone through 25+ revisions.

Additionally, when change occurs, even after first electronic publication, some editors allow further clarifications to make what we regard as extremely important, even paradigm shifting work, even better. We regard this method as the future of peer-review. Anonymous reviewers have advantages, but they can create significant bias or rigidity or even prejudice and result in sticking at Level 1 or 2 of 11-NCR or can accept papers that are poor. Every so often we encounter someone who admits their lack of expertise and is at Level 6 of 11-NCR.^{177; 179; 178}

Conclusion

What do we conclude? In our humble opinion, the data is cogent that 4D scientists applying the reductionist model of physics should extend their studies to the whole picture including details about 9D science or even 9D+ science. TDVP has been a game-changer.

We should be at the stage of Level 10 of 11 NCR of Neppe and Close. This should correspond with Kuhn's Stage 3 of Scientific Revolutions.^{177; 179; 178}

The 4D scientists should apply 9D science particularly in the quantal and cosmological

disciplines where there are many insoluble 4D level conundrums, but they will not need to reject the great findings of our 4D physical macroworld. 4D remains an extraordinarily important part of the 9D picture, but not the whole terrain. Extending conventional scientific materialism from 3S-1t to learning about 9D+ science is very logical and should not be controversial: 9D is not a speculation, but is based on cogent and reproducible and empirically relevant mathematics.

The availability of 9D science allows scientists to progress more rapidly in their research because there are many new or unexplored areas to discover or investigate. This implies incorporating multidimensionality, the infinite and consciousness: TDVP certainly significantly advances the landscape, and so does the LFAF and 11-NCR models. Through 9D+ science, we also have unified the laws of nature, and that unification, too, might provide new areas for exploration or philosophical debate. As we envisage it, old ideas must be overridden and buried. However, the scientific method requires logic, common-sense, and applying LFAF. We examine the scientifically feasible without even 4D science falsification.

Derision based on ignorance, and lack of training, results in scoffers who might ultimately embarrass themselves, and be disrespected. They might reflect the mediocre failures who will never achieve, and instead remain at the lower rungs of 11-NCR. We welcome *open-minded* skeptics coherently communicating and demonstrating the cogency of their argument. These skeptics on 9D and 9D+ science would have studied the material prior to disparaging the legitimate. It's excellent to exhibit appropriate open-minded skepticism about any research: Even Einstein was a skeptic about quantum theory with its illogical paradoxes, spending his last 20 years investigating extra dimensions (but sadly, not including consciousness.)¹⁹²⁻¹⁹⁴

Our model will, no doubt, be wrong in some respects. Time will tell how. Yet TDVP, based on 7+ years of 'pivotal, earth-shaking, all-important' results, with international, interdisciplinary and multidisciplinary recognition, such as the Whiting Memorial Award^{j 195; 196}, deserves a careful, comprehensive, educated analysis by teams of *qualified* mathematical scientists familiar with DBP who can thoroughly objectively approach this metaparadigm. There will be areas of dispute, components for debate, and necessary corrections needed. Possible amplifications of secondary hypotheses are required, with full-blown open-minded skepticism, and applications of current scientific and mathematical logic.

All these factors are not new: It was already a significant problem as long ago as 1943. This was pointed out by Erwin Schrödinger¹⁹⁷ in a lecture given in Dublin, Ireland. "*We feel clearly that we are only now beginning to acquire reliable material for welding together the sum total of all that is known into a whole. But, on the other hand, it has become next to impossible for a single mind fully to command more than a small specialized portion of it.*"

^j E.g., please see https://www.thethousand.com/2016_dr_vernon_neppe_and_dr.php, and <http://tddvp.com/>

References for “Does the Triadic Dimensional Vortical Paradigm (TDVP) alter the landscape from 4D science to 9D science?” and a short post-script.

1. Shaw GB: *Annajanska, the Bolshevik empress (Play)*. London: Coliseum Theatre. 1918.
2. Neppe VM, Close ER: The first conundrum: can the standard scientific model be applied to develop a complete theory of reality? *IQNexus Journal* 7: 2; 15-20, 2015.
3. Close ER, Neppe VM: Translating fifteen mysteries of the universe by applying a nine dimensional spinning model of finite reality: A perspective, the standard model and TDVP. Part 1. *Neuroquantology* 13: 2; 205-217, 2015.
4. Donoghue JF, Golowich E, Holstein BR: *Dynamics of the standard model*. Cambridge, UK: Cambridge University Press. 1994.
5. Oerter R: *The theory of almost everything: the standard model, the unsung triumph of modern physics*. New York: Person Education. 2006.
6. Pokharna S: *Is the modern science finally approaching Jainism? (original in Hindi)*. Ahmedabad: Jinendu. 2018, March 25.
7. Pokharna SS: The modern science appears to be approaching towards Jainism: Strong evidence that direct knowledge through consciousness is possible. 2018, in press.
8. Pokharna SS, Prajna C: Jain concepts and TDVP model for the theory of Everything: Some remarkable parallels. *Transactions of International School for Jain Studies II*: 2, 2018, In press.
9. Neppe VM, Close ER: *Reality begins with consciousness: a paradigm shift that works (Second Edition)* 1 Edition. Seattle: Brainvoyage.com. 2012.
10. Neppe VM, Close ER: *Reality begins with consciousness: a paradigm shift that works (First Edition)* 1 Edition. Seattle: Brainvoyage.com. 2012.
11. Neppe VM, Close ER: *Reality begins with consciousness: a paradigm shift that works (5th Edition)* Fifth Edition. Seattle: Brainvoyage.com. 2014.
12. Close ER, Neppe VM: Putting consciousness into the equations of science: the third form of reality (gimmel) and the “TRUE” units (Triadic Rotational Units of Equivalence) of quantum measurement *IQNexus Journal* 7: 4; 7-119, 2015.
13. Neppe VM. Understanding Gimmel with Vernon Neppe. (YouTube). New Thinking Allowed, <https://www.youtube.com/watch?v=RhV96ShslU4>. 2018.
14. Close ER, Neppe VM: Speculations on the “God matrix”: The third form of reality (gimmel) and the refutation of materialism and on gluons. *World Institute for Scientific Exploration (WISE) Journal* 4: 4; 3-30, 2015.
15. Neppe VM, Close ER: Key ideas: the third substance, gimmel and the God matrix. Part 1. *World Institute for Scientific Exploration (WISE) Journal* 4: 4; 3-4, 2015.
16. Neppe VM, Close ER: The gimmel pairing: Consciousness and energy and life (Part 13D). *IQNexus Journal* 7: 3; 122-126, 2015.
17. Brax P. The supermoduli space of Matrix String Theory. 2011, <http://cdsweb.cern.ch/record/411941/files/9912103.pdf>. 2011.
18. Schwarz P. The official string theory website: Basics. <http://www.superstringtheory.com/basics/index.html> and <http://www.superstringtheory.com/forum>. 2003
19. Kiritsis E: *String theory in a nutshell*. Princeton: Princeton University Press. 2007.
20. Figueroa-O’Farrill JM. String theory in a nutshell. <http://www.strings.ph.qmw.ac.uk/WhatIs/Nutshell.html>. 2003.
21. Duff MJ: The theory formerly known as strings, *Scientific American*. February, 1998
22. Close ER, Neppe VM: Derivation and application of TRUE quantum calculus for the analysis of quantized reality, including empirically verifiable new approaches to mass, neutrons, protons, law of conservation of gimmel and TRUE, TDVP and Deuterium. 2018 In submission.

23. Neppe VM, Close ER: Relative non-locality and the infinite, in *Reality begins with consciousness: a paradigm shift that works (5th Edition)*. Edited by. Seattle, WA: Brainvoyage.com. 376-379 2014.
24. Neppe VM, Close ER: The discrete finite contained in the continuous infinite: some speculations (Part 13C). *IQNexus Journal* 7: 3; 120-122, 2015.
25. Neppe VM, Close ER: The infinite (Part 13B). *IQNexus Journal* 7: 3; 117-120, 2015.
26. Neppe VM, Close ER: Special concepts in the finite and infinite anomalous process (Part 13). *IQNexus Journal* 7: 3; 114-122, 2015.
27. Neppe VM, Close ER: A proposed Theory of Everything that works: How the Neppe-Close Triadic Dimensional Distinction Vortical Paradigm (TDVP) model provides a metaparadigm by applying nine-dimensional finite spin space, time and consciousness substrates and the transfinite embedded in the infinite producing a unified reality. *IQNexus Journal* 16: 3; 1-54, 2014.
28. Neppe VM, Close ER: The Triadic Dimensional Distinction Vortical Paradigm (TDVP): The nine-dimensional finite spin metaparadigm embedded in the infinite *Dynamic International Journal of Exceptional Creative Achievement* 1401: 1401; 4001-4041, 2014.
29. Morgart E: The theory of everything has nine dimensions: The sparkling diamond and the quanta jewel turn quantum physics and the nine-pronged world of consciousness— on its ear. *USA Today Magazine*: 1 (January); 66-68, 2014.
30. Smullyan R: *Gödel's incompleteness theorems*. Oxford: Oxford University Press. 1991.
31. Berto FJ: *There's something about Gödel: the complete guide to the incompleteness theorem*. New York: John Wiley and Sons. 2010.
32. Eddington A: *The philosophy of physical science*. Ann Arbor, MI: University of Michigan. 1938 (republished 1958).
33. Neppe VM, Close ER: The important Eddingtonian analogy: Part 1 *IQNexus Journal* 8: 1; 21-22, 2016.
34. Neppe VM, Close ER: The second conundrum: Falsifiability is insufficient; we need to apply feasibility as well Lower Dimensional Feasibility, Absent Falsification (LFAF) as a scientific method *IQNexus Journal* 7: 2; 21-23, 2015.
35. Neppe VM, Close ER: *Reality Begins with Consciousness (RBC)—Key Features* 2nd Edition. Seattle, WA: Brainvoyage.com. 2014.
36. Neppe VM, Close ER: Reality begins with consciousness revisited. *J. Parapsychology* 77: 2; 143-147, 2013.
37. Feynman RP: *Electrons and their interactions. QED: The strange theory of light and matter*. Princeton, New Jersey: Princeton University Press. 1985.
38. Feynman RP (ed.). *The Feynman lectures on physics*. USA, Addison-Wesley, 1965.
39. Cantor G (ed.). *Contributions to the founding of the theory of transfinite numbers*. New York, Dover, 1955.
40. Einstein A: Fundamental ideas and methods of the Theory of Relativity, presented in their development *Papers* 7: 31, 1920
41. Einstein A: *Relativity, the special and the general theory—a clear explanation that anyone can understand (Fifteenth Edition)*. New York: Crown Publishers. 1952.
42. Eddington A: *The expanding universe: astronomy's 'great debate', 1900-1931*. Cambridge: Press Syndicate of the University of Cambridge. 1933.
43. Koestler A: *The Sleepwalkers*. London: Hutchinson. 1959.
44. Planck M: Max Planck: Scientific Autobiography and Other Papers, in. Edited by. New York: Harper 33–34 (quotation) 1949.
45. Planck M. <https://www.goodreads.com/quotes/111818-science-advances-one-funeral-at-a-time>. circa 1950.
46. Planck M: On the law of distribution of energy in the normal spectrum. *Annalen der Physik* 4: 3; 553. Bibcode:1901AnP...1309..1553P. doi:1910.1002/and p. 19013090310, 1901.
47. Planck M: *There is no matter as such*, in Web notepad: Everything noticed and interesting. 1918
48. Planck M: *The theory of heat radiation (translator: Masius, M.P.)*: Blakiston's Sons & Co. 1912.

49. Sulloway F: *Born to rebel*. Oregon, IL: Quality Books. 1996.
50. Smith T. Marshall and Warren win Nobel for work on Helicobacter as cause of peptic ulcers. Pandas Thumb, <https://pandasthumb.org/archives/2005/10/marshall-and-wa.html>. 2005, October 3
51. Neppe VM, Close ER: Wondrous gimmel: Section 8. In Integrating spirituality into science: applying the Neppe-Close Triadic Dimensional Vortical Paradigm (TDVP). *IQNexus Journal* 10: 2; 42-47 2018.
52. Close ER, Neppe VM: Summary and conclusion gimmel, TRUE and the structure of reality (Part 20). *IQNexus Journal* 7: 4; 112-114, 2015.
53. Close ER, Neppe VM: Empirical exploration of the third substance, gimmel in particle physics (Part 10). *IQNexus Journal* 7: 4; 45-47, 2015.
54. Neppe VM, Close ER: Relative and dynamic psi, and gimmel: The non-local variants (Part 9). *IQNexus Journal* 7: 3; 74-83, 2015.
55. Smythies JR: *The walls of Plato's cave*. Aldershot: Avebury Press. 1994.
56. Ferguson AS: Plato's smile of light. (Part II.) The allegory of the cave (Continued). *JSTOR. The Classical Quarterly* 16: 1. 636164; 15-28, 1922.
57. Neppe VM: Aspects of psychical phenomena. *The Leech* 43: 27-35, 1973.
58. Neppe VM, Close ER: Fifty discoveries that are changing the world: Why the Triadic Dimensional Distinction Vortical Paradigm (TDVP) makes a difference. *IQ Nexus Journal* 9: 2; 7-39, 2017.
59. Close ER, Neppe VM: Introductory summary perspective on TRUE and gimmel (Part 1) in Putting consciousness into the equations of science: the third form of reality (gimmel) and the "TRUE" units (Triadic Rotational Units of Equivalence) of quantum measurement *IQNexus Journal* 7: 4; 8-15, 2015.
60. Close ER, Neppe VM: The TRUE unit: triadic rotational units of equivalence (TRUE) and the third form of reality: gimmel; applying the conveyance equation (Part 12). *IQNexus Journal* 7: 4; 55-65, 2015.
61. Neppe VM, Close ER: Speculations about gimmel Part 5. *World Institute for Scientific Exploration (WISE) Journal* 4: 4; 21-26, 2015.
62. Neppe VM, Close ER: The fourteenth conundrum: Applying the proportions of Gimmel to Triadic Rotational Units of Equivalence compared to the proportions of dark matter plus dark energy: Speculations in cosmology. *IQNexus Journal* 7: 2; 72-73, 2015.
63. Neppe VM, Close ER: Applying consciousness, infinity and dimensionality creating a paradigm shift: introducing the triadic dimensional distinction vortical paradigm (TDVP). *Neuroquantology* 9: 3; 375-392, 2011.
64. Neppe VM, Close ER: The Infinite: essence, life and ordropy *Dynamic International Journal of Exceptional Creative Achievement* 1204: 1204; 2159-2169, 2012.
65. Neppe VM, Close ER: The necessity for infinity: Section 3. *IQ Nexus Journal* 9: 1; 24-29, 2017.
66. Neppe VM, Close ER: The fifteenth conundrum: Applying the philosophical model of Unified Monism: Returning to general principles. *IQNexus Journal* 7: 2; 74-78, 2015.
67. Neppe VM, Close ER: Unified monism: linking science with spirituality in a philosophical model. Section 9: In Integrating spirituality into science: applying the Neppe-Close Triadic Dimensional Vortical Paradigm (TDVP). *IQNexus Journal* 10: 2; 48-51, 2018.
68. Bottomley J, Baez J: Last Update Date. Why are there eight gluons and not nine? Series Why are there eight gluons and not nine? Retrieved Date, Access 1996., <http://math.ucr.edu/home/baez/physics/ParticleAndNuclear/gluons.html>. 1996. <http://math.ucr.edu/home/baez/physics/ParticleAndNuclear/gluons.html>
69. Söding P: On the discovery of the gluon. *European Physical Journal H* 35: 1; 3-28, 2010.
70. Gell-Mann M: Symmetries of baryons and mesons. *Physical Review (Nuclear Physics)* 125: 3; 1067-1084, 1962.
71. Gell-Mann M: *The Quark and the Jaguar: Adventures in the Simple and the Complex*. New York, NY: Henry Holt and Co. 1995.

72. Close ER, Neppe VM: The problem of determining the mass of the neutron: Section 7: In: Derivation and application of TRUE quantum calculus for the analysis of quantized reality. 2018, In submission.
73. Close ER, Neppe VM: Applying hydrogen-1 and deuterium: The origin of mass: Section 8: In: Derivation and application of TRUE quantum calculus for the analysis of quantized reality. 2018, In submission.
74. Close ER, Neppe VM: Why TRUE units have to be correct: the mass in the proton: re-affirming the truth of Triadic Rotational Units of Equivalence. Chapter 6 *IQ Nexus Journal* 8: 4 —V6.122; 70-96, 2016.
75. Klimas L: 18 February 2014. The ‘God Particle’ explained in two minutes by the man who discovered it. The Blaze, <http://www.theblaze.com/stories/2014/02/18/the-god-particle-explained-in-two-minutes-by-the-man-who-discovered-it/>. 2014.
76. Davis R: Last Update Date. Researchers may have discovered ‘God particle’. Series Researchers may have discovered ‘God particle’ Retrieved Date, Access 2013, http://www.dailytoreador.com/news/article_41bdbbe06-911c-11e2-b902-0019bb30f31a.html. 2013.http://www.dailytoreador.com/news/article_41bdbbe06-911c-11e2-b902-0019bb30f31a.html
77. Lederman L, Teresi D: *The God Particle: If the universe Is the answer, what Is the question?* Seattle: Amazon Kindle. 1993.
78. Klein A: *Toward a new subquantum integration approach to sentient reality (unpublished)*, in. 1-40. Israel. 2010
79. Stewart D: *The chemistry of essential oils made simple: God’s love manifest in molecules*. Marble Hill, MO: Care publications. 2005.
80. Lenntech: *Silicon (Si) and water: Silicon and water: reaction mechanisms, environmental impact and health effects*, in Encyclopedia of science. (<http://www.lenntech.com/periodic/water/silicon/silicon-and-water.htm>). 2015
81. Darling D: *Silicon-based life*, in Encyclopedia of science. (<http://www.daviddarling.info/encyclopedia/E/elcosmic.html>). 2015
82. Popper KT: *The logic of scientific discovery*. London and New York: Routledge / Taylor and Francis e-Library. 2005.
83. Popper K: *Conjectures and refutations*. London: Routledge and Keagan Paul. 1972.
84. Stapp HP: *Mindful universe: Quantum mechanics and the participating observer*. New York Springer-Verlag. 2007.
85. De Bianchi MS: Quantum measurements are physical processes. Comment on “Consciousness and the double-slit interference pattern: Six experiments”, By Dean Radin et al. [*Physics Essays* 25, 2 (2012)]. <http://arxiv.org/abs/1207.0804>, 2012.
86. Radin D: Consciousness and the double-slit interference pattern: Six experiments. *Physics Essays* 25: 2; 157– 171, 2012.
87. Neppe VM, Close ER: Relative non-locality - key features in consciousness research (seven part series). *Journal of Consciousness Exploration and Research* 6: 2; 90-139, 2015.
88. Neppe VM, Close ER: The concept of relative non-locality: Theoretical implications in consciousness research. *Explore (NY): The Journal of Science and Healing* 11: 2; 102-108, [http://www.explorejournal.com/article/S1550-8307\(14\)00233-X/pdf](http://www.explorejournal.com/article/S1550-8307(14)00233-X/pdf). 2015.
89. Neppe VM, Close ER: Integrating spirituality into science: applying the Neppe-Close Triadic Dimensional Vortical Paradigm (TDVP). *IQNexus Journal* 10: 2; 7-108, 2018.
90. Neppe VM. The dyadic, creative Interface with Vernon Neppe (YouTube) On TDVP and the Neppe-Close relationship. New Thinking Allowed, https://www.youtube.com/watch?v=AtMQdS8_Vck&t=2123s. 2018.
91. Koestler A: *The act of creation*. London: Penguin. 1970
92. Neppe VM, Close ER: Perspective: dimensional biopsychophysics: approaching dimensions, infinity, meaning, and understanding spirituality and the laws of nature: Section 13. In Integrating spirituality into science: applying the Neppe-Close Triadic Dimensional Vortical Paradigm (TDVP). *IQNexus Journal* 10: 2; 71-77, 2018.
93. Neppe VM, Close ER: On Non-locality III: Dimensional Biopsychophysics. *Journal of Consciousness Exploration and Research* 6: 2; 103-111, 2015.
94. Truzzi M: On the extraordinary: An attempt at clarification. *Zetetic Scholar* 1: 1; 11, 1978.
95. Palmer WF: Cabibbo angle and rotation projection. *Phys. Rev., D* 8: 4; 1156-1159, 1973.

96. Reifler F, Morris R: Prediction of the Cabibbo angle in the vector model for electroweak interactions. *J. Math. Phys.* 26: 8; 2059-2066, 1985.
97. Close FE, Lipkin HJ: Puzzles in Cabibbo-suppressed charm decays. *Physics Letters B* 551: 3-4; 337-342, 2003.
98. Hughes IS: Cabibbo Mixing, in *Hughes, I.S.*, Vol. Elementary Particles (3rd ed.). Edited by Hughes IS. Cambridge University Press.: Cambridge, England. 242–243 1991.
99. Close ER, Nepe VM: The eleventh conundrum: The double Bell normal curve and its applications to electron cloud distribution *IQNexus Journal* 7: 2; 51-56, 2015.
100. Nepe VM, Close ER: The sixteenth conundrum: The general immediate implications of a nine dimensional reality *IQNexus Journal* 7: 2; 79-80, 2015.
101. Close ER, Nepe VM: Translating fifteen mysteries of the universe: Nine dimensional mathematical models of finite reality, Part II. *Neuroquantology* 13: 3; 348-360, 2015.
102. Close ER, Nepe VM: Mathematical and theoretical physics feasibility demonstration of the finite nine dimensional vortical model in fermions. *Dynamic International Journal of Exceptional Creative Achievement* 1301: 1301; 1-55, 2013.
103. Nepe VM, Close ER: The Cabibbo mixing angle (CMA) derivation: Is our mathematical derivation of the Cabibbo spin mixing angle (CSMA) equivalent? *IQNexus Journal* 7: 4; 120-128, 2015.
104. Close ER, Nepe VM: The seventh conundrum: the mathematical derivation of the Cabibbo mixing angle in fermions. *IQNexus Journal* 7: 2; 41-43, 2015.
105. Close ER, Nepe VM: The sixth conundrum: theoretical knowledge on deriving the Cabibbo angle. *IQNexus Journal* 7: 2; 39-40, 2015.
106. Close ER, Nepe VM: The Cabibbo mixing angle and other particle physics paradoxes solved by applying the TDVP multidimensional spin model. *IQNexus Journal* 14: 1; 13-50, 2014
107. Close ER, Nepe VM: The thirteenth conundrum: introducing an important new concept, TRUE units—Triadic Rotational Units of Equivalence. *IQNexus Journal* 7: 2; 60-71, 2015.
108. Anonymous. Planck mission full results confirm canonical cosmology model. Dark matter, dark energy, dark gravity, <https://darkmatterdarkenergy.com/2015/03/07/planck-mission-full-results-confirm-canonical-cosmology-model/>. 2015.
109. Collaborators P: Planck Publications: Planck 2015 Results European Space Agency. *Astro-ph CO* Febr, 2015.
110. Collaborators P: Planck 2013 results. XVI. Cosmological parameters. *Astro-ph.CO* arXiv:1303.5076, 2013.
111. Collaborators P: Planck 2013 results. I. Overview of products and scientific results. *Astro-ph.CO* ArXiv:1303.5062, 2013.
112. Nepe VM, Close ER: A data analysis preliminarily validates the new hypothesis that the atom 'contains' dark matter and dark energy: Dark matter correlates with gimmel in the atomic nucleus and dark energy with gimmel in electrons. *IQ Nexus Journal* 8: 3; 80-96, 2016.
113. Nepe VM, Close ER: The groundbreaking paradigm shift: Triadic Dimensional- Distinction Vortical Paradigm (“TDVP”): A series of dialogues. *Telicom* 29: 1-4 52-177, 2017.
114. Close ER, Nepe VM: The Triadic Dimensional Vortical Paradigm (TDVP) is valid and appropriate: The roles of neutrons and protons, particle emergence including decay and vortical spin - A response. *Telicom* 30: 3; 95-105, 2018.
115. Nepe VM: Genius and exceptional intelligence. *IQNexus Journal* 6: 4; 7-66, 2014.
116. Nepe VM: The concept of genius and prodigies (Section 3). *IQNexus Journal* 6: 4; 24-33, 2014.
117. Nepe VM: The unsung “new factors” differentiating genius and prodigies (Section 6). *IQNexus Journal* 6: 4; 54-66, 2014.
118. Nepe VM: The creativity quotient and the hypothesized c factor: the property of creativity (Section 5) *IQNexus Journal* 6: 4; 48-53, 2014.

119. Close ER: Can a quantum physics description of brain dynamics explain consciousness? *Telicom* 22: 1; 36-44, 2009.
120. Close ER, Neppe VM: Dimensions, consciousness and infinity. *Dynamic International Journal of Exceptional Creative Achievement* 1203: 1203; 2129 -2139, 2012.
121. Dossey L: The millennium of consciousness: reflections on the one mind. *Explore (NY)* 9: 2; 67-74, <http://www.ncbi.nlm.nih.gov/pubmed/23452706>. 2013.
122. Nelson RD: Coherent consciousness and reduced randomness: correlations on september 11, 2001. *Journal of Scientific Exploration* 16: 4; 549-570, 2002.
123. Neppe VM: Phenomenological consciousness research: ensuring homogeneous data collection for present and future research on possible psi phenomena by detailing subjective descriptions, using the multi-axial a to z SEATTLE classification. *Neuroquantology* 9: 1; 84-105, 2011.
124. Neppe VM, Close ER: *Reality Begins with Consciousness (RBC) — Glimpses and Glossary* 2nd Edition. Seattle, WA: Brainvoyage.com. 2014.
125. Neppe VM, Close ER: The different faces of psychology and the perspective of “Consciousness”: Part 2. *IQNexus Journal* 15: 2; 17-19, 2014.
126. Neppe VM, Close ER: EPIC consciousness: A pertinent new unification of an important concept. *Journal of Psychology and Clinical Psychiatry* 1: 00036: 6; 1-14, 2014.
127. Biggio C, Feruglio F, Masina I, et al.: Fermion generations, masses and mixing angles from extra dimensions. *J. Nuclear Physics B* DOI:10.1016: 10.052; 1-22, [http://www.researchgate.net/researcher/9966595_Carla_Biggio/..](http://www.researchgate.net/researcher/9966595_Carla_Biggio/) 2003.
128. Close ER, Neppe VM: Fifteen mysteries of 9 dimensions: on Triadic Rotational Units of Equivalence and new directions, Part III. *Neuroquantology* 13: 4; 439-447, 2015.
129. Close ER, Neppe VM: Understanding TDVP through dimensions: chapter 5. *IQ Nexus Journal* 8: 4 —V6.122; 61-69, 2016.
130. Halpern P: *The great beyond: higher dimensions, parallel universes and the extraordinary search for a theory of everything*. Hoboken, NJ: John Wiley & Sons. 2005.
131. Neppe VM, Close ER: Toward a method of proof for added dimensions (Part 8). *IQNexus Journal* 7: 3; 68-73, 2015.
132. Neppe VM, Close ER: Dimensions and dilemmas (Part 13A). *IQNexus Journal* 7: 3; 115-117, 2015.
133. Neppe VM, Close ER: Reality, 9 dimensions, and TDVP, Section 1. *IQ Nexus Journal* 9: 1; 8-16, 2017.
134. Pico RM: *Consciousness in four dimensions: biological relativity and the origins of thought*. New York: McGraw. 2002.
135. Close ER, Neppe VM: The mathematics and logic of infinity *Dynamic International Journal of Exceptional Creative Achievement* 1204: 1204; 2140 -2158, 2012.
136. Close ER, Neppe VM: The role of mathematics in investigating the nature of reality (Part 4). *IQNexus Journal* 7: 4; 22-26, 2015.
137. Close ER, Neppe VM: Defining the basic units of quantum mathematics for a quantum calculus: Section 3: In: Derivation and application of TRUE quantum calculus for the analysis of quantized reality. 2018, In submission.
138. Stewart I: *The mathematics of life*. NY: Basic Books. 2011.
139. Wang H: *From mathematics to philosophy*. London Routledge and Kegan Paul. 1974.
140. Close ER, Neppe VM: The Calculus of Distinctions: A workable mathematicologic model across dimensions and consciousness. *Dynamic International Journal of Exceptional Creative Achievement* 1210: 1210; 2387 -2397, 2012.
141. Close ER, Neppe VM: Further implications: quantized reality and applying Close’s Calculus of Distinctions versus the Calculus of Newton(Part 19). *IQNexus Journal* 7: 4; 110-111, 2015.
142. Close ER, Neppe VM: Understanding the calculus of distinctions and its role in TDVP: chapter 8 *IQ Nexus Journal* 8: 4 — V6.122; 107-114, 2016.
143. Close ER, Neppe VM: Application of TRUE analysis to the elements of the periodic table: Section 9: In: Derivation and application of TRUE quantum calculus for the analysis of quantized reality. 2018, In submission.

144. Neppe VM: *The Psychology of Déjà Vu: Have I been Here Before?* Johannesburg: Witwatersrand University Press. 1983.
145. Neppe VM, Close ER: Integrating psychology into the TDVP model. *IQNexus Journal* 15: 2; 7-38, 2014.
146. Neppe VM, Close ER: The most logical psychology: The “horizontal” approach” to Transpersonal and Humanistic Psychology in the TDVP context: Part 3. *IQNexus Journal* 15: 2; 20-24, 2014.
147. Neppe VM, Close ER: The most logical psychology: The “vertical” approach” to the transcendental and Transpersonal Psychology in the TDVP context: Part 4. *IQNexus Journal* 15: 2; 25-38, 2014.
148. Bokulich A, Jaeger G: *Philosophy of quantum information and entanglement*, in. Cambridge: Cambridge University Press. 2010. <http://dx.doi.org/10.1017/CBO9780511676550>
149. Griffin DR: Parapsychology and philosophy: A Whiteheadian postmodern perspective. *Journal of the American Society for Psychical Research* 87: 3; 217-288, 1993.
150. Neppe VM, Close ER: Re-evaluating our assessments of science: The approach to discovery, applying LFAF to the philosophy of science *IQNexus Journal* 8: 1; 20-31, 2016.
151. Neppe VM, Close ER: Resolving the scientific approach by amplifying the Philosophy of Science: Part 3 *IQNexus Journal* 8: 1; 25-31, 2016.
152. Whiteman JHM: *Philosophy of space and time and the inner constitution of nature: a phenomenological study*. London: George Allen and Unwin. 1967.
153. Neppe VM. Kabbalah, science, and spirituality with Vernon Neppe (YouTube). New Thinking Allowed, https://www.youtube.com/watch?v=AtMQdS8_Vck&t=2123s. 2018.
154. Close ER, Neppe VM: The proton: Section 6: In: Derivation and application of TRUE quantum calculus for the analysis of quantized reality. 2018, In submission.
155. Bohr H, Nielsen HB: Hadron production from a boiling quark soup: quark model predicting particle ratios in hadronic collisions. *Nuclear Physics B* 128: 2; 275, 1977.
156. Dossey L: Creativity: on intelligence, insight, and the cosmic soup. *Altern Ther Health Med* 6: 1; 12-17, 108-117, <http://www.ncbi.nlm.nih.gov/pubmed/10631815>. 2000.
157. Koberlein B. Measurements of neutron decay disagree, and we don't know why. Forbes Magazine, <https://www.forbes.com/sites/briankoberlein/2016/04/16/measurements-of-neutron-decay-disagree-and-we-dont-know-why/#4cfcd1b285bb>. 2016.
158. Miernik K, Rykaczewski KP, Gross CJ, et al.: Large beta-delayed one and two neutron emission rates in the decay of ⁸⁶Ga. *Phys Rev Lett* 111: 13; 132502, <http://www.ncbi.nlm.nih.gov/pubmed/24116772>. 2013.
159. Lorusso G, Nishimura S, Xu ZY, et al.: Beta-Decay half-lives of 110 neutron-rich nuclei across the N=82 shell gap: Implications for the mechanism and universality of the astrophysical r process. *Phys Rev Lett* 114: 19; 192501, <http://www.ncbi.nlm.nih.gov/pubmed/26024165>. 2015.
160. Bales MJ, Alarcon R, Bass CD, et al.: Precision Measurement of the Radiative beta Decay of the Free Neutron. *Phys Rev Lett* 116: 24; 242501, <http://www.ncbi.nlm.nih.gov/pubmed/27367385>. 2016.
161. Neppe VM, Close ER: Redefining science: Applying Lower Dimensional Feasibility, Absent Falsification (LFAF): Section 1. In Integrating spirituality into science: applying the Neppe-Close Triadic Dimensional Vortical Paradigm (TDVP). *IQNexus Journal* 10: 2; 9-13, 2018.
162. Neppe VM. Feasibility and falsification in science: On LFAF (YouTube). New Thinking Allowed, <https://youtu.be/w3elui7unrA>. 2018.
163. Neppe VM, Close ER: Interpreting science through feasibility and replicability: Extending the scientific method by applying “Lower Dimensional Feasibility, Absent Falsification” (LFAF). *World Institute for Scientific Exploration (WISE) Journal* 4: 3; 3-37, 2015.
164. Neppe VM. Science and pseudoscience. Retrieved 6 August 2018, Email to Surendra Pokharna 2018.

165. Wheeler JA: accessed August 2018. Brainyquotes of John Wheeler.
https://www.brainyquote.com/authors/john_archibald_wheeler.
166. Close ER: *Transcendental Physics*. Lincoln: I-Universe. 2000.
167. Neppe VM, Close ER: Explaining psi phenomena by applying TDVP principles: A preliminary analysis *IQNexus Journal* 7: 3; 7-129, 2015.
168. Close ER, Neppe VM: Unifying quantum physics and relativity (Part 8). *IQNexus Journal* 7: 4; 36-40, 2015.
169. Georgia State University. Big bang nucleosynthesis. In Hyperphysics <http://hyperphysics.phy-astr.gsu.edu>, at <http://hyperphysics.phy-astr.gsu.edu/hbase/Astro/bbnuc.html>. 2005.
170. Schroeder GL: *Genesis and the big bang*. New York: Harper Collins. 1990.
171. Neppe VM. Questions and comments: Unexplained conundrums and paradoxes solved through TDVP. Retrieved 18 July 2018, Email to Surendra Pokharna 2018.
172. Popper K: *A world of propensities* London: Thoemmes. 1990.
173. Neppe VM, Close ER: The statistical proof of psi. *Dynamic International Journal of Exceptional Creative Achievement* 1207: 1207; 2277-2290, 2012.
174. Neppe VM: Six sigma protocols, survival / superpsi and meta-analysis. Accessed Jan 9 Accessed. 2011.
175. Neppe VM: Double blind studies in Medicine: perfection or imperfection? *Telicom* 20: 6 (Nov. -Dec); 13-23., 2007.
176. Neppe VM: Ethics and informed consent for double-blind studies on the acute psychotic. *Medical Psychiatric Correspondence: A Peer Reviewed Journal. Model Copy* 1: 1; 44-45, 1990.
177. Neppe VM, Close ER: What is Science? A perspective on the revolutions of change. *IQNexus Journal* 8: 1; 7-19, 2016.
178. Kuhn T: *The structure of scientific revolutions* 1st Edition. Chicago: Univ. of Chicago Press. 1962.
179. Neppe VM, Close ER: Revisiting Thomas Kuhn: An extended structure for Scientific Revolutions: Part 2 *IQNexus Journal* 8: 1; 11-19, 2016.
180. Schopenhauer A. Quotations by Author (Schopenhauer). www.quotationspage.com/quote/25832.html. 1825 (circa).
181. Close ER, Neppe VM: The twelfth conundrum: The thought experiment replication of 9 dimensional spin. *IQNexus Journal* 7: 2; 57-59, 2015.
182. Close ER, Neppe VM: The eighth conundrum: angular momentum and intrinsic electron spin. *IQNexus Journal* 7: 2; 44-45, 2015.
183. Close ER, Neppe VM: The nine-dimensional finite spin model (Part 14). *IQNexus Journal* 7: 4; 70, 2015.
184. Close ER, Neppe VM: Jumping beyond the current reality (Part 3). *IQNexus Journal* 7: 4; 19-21, 2015.
185. Close ER, Neppe VM: A new paradigm describing the nature of reality and what it implies for the future of science: Preface (Part 2). *IQNexus Journal* 7: 4; 16-18, 2015.
186. Neppe VM, Close ER: Section 3: Integrating the mechanisms of psi. *IQNexus Journal* 7: 3; 98-138, 2015.
187. Close ER, Neppe VM: The origin of mass: Section 5: In: Derivation and application of TRUE quantum calculus for the analysis of quantized reality. 2018, In submission.
188. Neppe VM, Close ER: Statistical demonstrations of psi. (Part 2). *IQNexus Journal* 7: 3; 18-32, 2015.
189. Neppe VM, Close ER: Theoretical bases to analyze psi (Part 3). *IQNexus Journal* 7: 3; 33-42, 2015.
190. Bauer H: Misleading notions about science and their consequences. *WISE journal* 4: 2; 30-36, 2015.
191. Bauer H: *Dogmatism in science and medicine: How dominant theories monopolize research and stifle the search for truth*. New York: McFarland. 2012.
192. Einstein A: *Physics and Reality*. <http://www.kostic.niu.edu/>: Monograph. 1936.
193. Einstein A: Creative thought, *New York Times*, March 19, 1940. 1940.
194. Einstein A, Podolsky B, Rosen N: Can quantum-mechanical description of physical reality be considered complete? *Phys. Rev.* 47: 10; 777-780, 1935.
195. Editor: Neppe, V.M. Close, E.R. The Whiting Memorial Award. *Telicom* 29: 1-4 11-14, 2017.

196. Editor on Nepe VM, Close ER: *Special Press Release: Dr Vernon Nepe and Dr Edward Close win prestigious ISPE international prize: The Whiting Memorial Award for 2016*. 2016.
197. Schrödinger E: *What is life?: With mind and matter and autobiographical sketches*. Cambridge: Cambridge University Press. 1992.
198. Close ER: *The case for the non-quantum receptor (presentation)*, in Toward a Science of Consciousness Conference, Tucson II. Tucson II: Presentation. 1996
199. Nepe VM: *Vortex N-dimensionalism: a philosophical–scientific paradigm and alternative to mind-body theories*. Seattle, WA, USA. 2003.
200. Nepe VM: *Vortex n-dimensional pluralism: scientific empiricism, the heuristic approach and natural law*. Seattle, WA, USA. 2003.
201. Nepe VM. *Vortex pluralism: a new philosophical perspective*. http://www.pni.org/philosophy/vortex_pluralism.shtml/. 1997.
202. Nepe VM: *Vortex pluralism*, in American Philosophical Association: The Society for the Anthropology of Consciousness. Seattle, WA. 1996
203. Close ER, Nepe VM: *Why a new calculus with quantum equivalence units is needed: Section 2: In: Derivation and application of TRUE quantum calculus for the analysis of quantized reality*. 2018, In submission.

Important Postscript: You will recall Nepe’s dialog with the ostensibly open-minded, but, with respect, uninformed 4D scientist, who reflected a classical reductionist model of consciousness: *There seems to be a large pseudo-scientific community who love theories that separate the mind from the body, but I have yet to see a theory that shows that consciousness is more than just an emergent property of the neural system.*” We also philosophically regard dualism as irreconcilable^{66, 67}, but there is no contradiction with our Unified Monism^{66, 67} model. A referee observed:

“*In Transcendental Physics*,¹⁶⁶ Close described the ‘non-quantum receptor’. This performs several jobs:^{11; 166 198}

1. *If quantum mechanics is true, ‘consciousness’ cannot be an epiphenomenon emerging from neurological system. This is because the ‘final observer’ in a chain of neurological reactions reflecting a purely quantum phenomenon would run into an ‘infinite regression’. Yet, we can solve this paradox by assuming a ‘non-quantum something’ at the end.*
2. *But if something is ‘non-quantum’ what is that? It is neither mass nor energy since both mass and energy obey quantum rules. This ‘non-quantum receptor’ is effectively mass-less and energy-less, so this receptor implies the equivalence of ‘gimmel’. Importantly, Drs. Nepe and Close argue gimmel is in some way linked with **consciousness**.*
3. *This ‘non-quantum receptor’ discovery is separate from their later independently achieved **TRUE** analyses, which applied quanta, dimensional analysis, calculus of distinctions, Diophantine equations and ultimately gimmel.^{12; 22}*
4. *Close’s more complex proof of a non-quantum receptor existing prior to the appearance of the first quantum verifies the assertions that gimmel/ consciousness **predates** matter: This origin before the event horizon is strongly emphasized in the Nepe-Close book *Reality **Begins** With Consciousness: A Paradigm Shift That Works*.^{11”}*
5. *Furthermore, gimmel exists independently, but has a necessary tethering with mass-energy in the finite reality. But it pre-exists mass-energy and likely exists for all times in the **infinite**, which envelops the finite.*
6. *By skewering the 4D materialist approach to consciousness, we put our open-minded skeptical opponents into an incredibly difficult position. They must accept there is a non-quantum aspect to reality. Checkmate!”*

Nepe adds: “*Early on, I recognized a ‘meaning’ or ‘consciousness’ inseparably tethered to space (‘qusits’), time (‘chronits’) and consciousness (‘conscits’) making up ‘qualits.’^{9; 10} We now realize that these cannot be ‘subquantal’, per se, but part of the ‘infinite continuity’ as a necessary expression of the infinite enveloping the finite, and the union of gimmel with all stable structures: Yet, gluons and Higgs Bosons are massless (and likely energyless) in 4D.^{16; 14; 15} However, as demonstrated, they appear incompatible or irrelevant in 9D models. Quantum ‘weirdness’³⁸ is as normal as a flat earth. But the concept has sustained itself for a century, because the abnormal became acceptable! Beginning in 1989, I realized how fundamental and ubiquitous vortices were in nature including when applying a multidimensional fabric.¹⁹⁹⁻²⁰² Vortices had to work! Now we recognize that 9D finite rotations along different orthogonal planes are key with all rotations being fundamentally volumetric in nature, extending across 9D. This changes concepts from particle subatomic structures to the entirely new 9D science, we’re calling ‘vortical physics’.^{22; 143; 203} This is even more than checkmate! Not only a game, but a world: It’s paradigm shifting.*