



IQ Nexus Journal

Reality Begins

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A Nutshell Key Perspective on the Neppe-Close “Triadic Dimensional Distinction Vortical Paradigm” (TDVP).

Vernon M Neppe MD, PhD, FRSSAf and Edward R Close PhD, PE^{ab}

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This photo is of Dr Edward Close (left) and Dr Vernon Neppe (right) in Puebla, Mexico after receiving the prestigious Gabino Barreda Award and medal in February 2013. Their plenary presentations on their important metaparadigm Triadic Dimensional Distinction Vortical Paradigm (TDVP) and the book that describes TDVP, Reality Begins with Consciousness before a 2000 to 3000 audience and their all day workshop to 150 registrants were very well received. They received this award from the Mexican (Puebla) Department of Education in February 2013, long before their Cabibbo findings were developed. The collaboration between Dr Neppe and Dr Close goes back to 2009, though both were working on their complimentary areas of research for two decades before that. They both recognized the enormous relevance of what they were doing and were prepared to devote thousands of unpaid hours to benefit mankind in that regard. Ironically, the Gabino Barreda award preceded their even more major contributions of demonstrating finite reality involves 9 spinning dimensions, and that all particles are in union with gimmel, that the materialistic model of the atom is refuted, and that the proportions of dark matter and dark energy to the cosmos, correlates exactly with the ratio of gimmel to TRUE in the equivalent cosmological elements, namely predominantly Hydrogen and also Helium. Dr Neppe and Dr Close have now received a separate prestigious, interdisciplinary international award, the 2016 Whiting Memorial Prize.

Drs. Neppe and Close win prestigious international prize.

Dr. Edward Close and Dr. Vernon Neppe were honored on 9 August 2016 with the **2016 Whiting Memorial Award** for “*expanding boundaries of scientific understanding*”.

The Whiting Memorial Fund is a philanthropic fund administered by the International Society for

Philosophical Enquiry (“ISPE”) (thethousand.com) to reward individuals and groups, whose accomplishments and goals exemplify the ideals of ISPE. This international award is open to everyone, and is given to a person/ persons or organization (outside or within ISPE) who typifies the I.S.P.E. ideal of “*someone who strives to benefit society in general through advanced enquiry, original research and/or creative contributions, and who has demonstrated significant progress in these endeavors*”. The award may be conferred yearly but historically has been seldom awarded, because it is only conferred when the committee unanimously chooses a worthy nominee. ISPE’s only mission is “*to attract the world’s most intellectually gifted individuals and hopefully direct their achievements for the betterment of all humankind.*” ISPE advances no political, governmental, religious, race, gender, ethnic, activist or academic agenda. Dr. Neppe and Dr. Close are already “Diplomates of

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^b *Acknowledgments: We gratefully acknowledge the ECAO for publishing permission. © Thank you for the editorial assistance particularly of Jacqueline Slade. Thanks to Suzan Wilson, Erin Morgart, Laura Jackson, Stanislav Riha and anonymous referees. Neppe V, Close E. Nutshell on TDVP. IQNJ 8:3, 7-79 September 2016. V10.36*

the ISPE” — the highest public level of ISPE achievement: Currently there are about two dozen such Diplomates worldwide. “*This is what ISPE is all about: Making our world better by encouraging profound excellence*”, emphasized Stephen Levin, the ISPE President. “*This award should have happened a long time ago to Drs Neppe and Close. It’s well-deserved and too long coming.*”

What is special about the reasoning behind this Whiting Prize award?

1. First, Dr Vernon Neppe and Dr Edward Close developed a new scientific model, the “Triadic Dimensional Distinction Vortical Paradigm” (TDVP). What’s its relevance? TDVP has universally applicable groundbreaking implications being multidisciplinary, especially impacting specialists in the sub-disciplines of mathematics, quantum physics, cosmology, systems theory, biology, consciousness research, psychology, philosophy, phenomenology and philosophy of science.
2. The fundamental TDVP axiom is that not only are there substrates of Space and Time, but there is also a third substrate, the extent of Consciousness. All three are separate and yet tethered together like an arm to a shoulder, never to be completely separated. TDVP changes the fundamental basis of reality: Why’s this important? Because before scientists spoke about Space-Time. Now they can talk about Space-Time-Consciousness, a dramatic paradigm shift.
3. Not satisfied with these findings, these scientists then mathematically *proved* (they did not just hypothesize or theorize) that our finite reality consists specifically of 9 spinning dimensions (9-D) (not any other low number). Why is 9-D important? Because, before we had thought that we could explain everything in our experience applying 3 dimensions of Space in a moment in time (“3S-1t”). Close and Neppe showed that 3S-1t was insufficient to describe some of the more subtle rules of physics. Nevertheless, our 3S-1t *experience of living* is not negated, it’s just there’s much more to our *existence*, including these added dimensions.
4. Fourth, Drs. Neppe and Close proposed that these 9 spinning dimensions are *quantized* —they consist of whole three-dimensional pieces —and have volume. These are contained (‘embedded’) in an infinite reality that is continuous and extends forever. Why is that important? This means that we all exist in a single unit. Furthermore, the so-called ‘spiritual’ can *impact* on our experience all the time, and with feedback both ways, we can change and modify our free-will. Everything is part of each other. Science finally is not an enemy of the mystical but a unified with spirituality.
5. But does TDVP fundamentally change reality? Yes, it constitutes possibly the most important paradigm shift of this century, because it is so far-reaching: Now, not only is there a measurable extent of Space, Time and Consciousness (STC), but Close and Neppe have maintained that this STC only has *meaning* when the ‘container’, a mathematically demonstrated third substance (called ‘gimmel’)[°] comes into play. The presence of gimmel ultimately *unifies*, for the *first time ever*, quantum, macroscopic and cosmological reality: There is now just one set of rules. Gimmel is the container—the receptacle—of consciousness, and because gimmel is necessarily quantized and volumetric, the

[°] Gimmel (also ‘gimel’) ג is the mystical third letter of the Hebrew alphabet. Mystically, it means appropriately a ‘linkage’, ‘bridge’, and ‘nourish’. Daled (also ‘dalet’) ד is the fourth Hebrew letter and mystically means ‘door’, ‘lift up’, and ‘charitable’.

mathematics produces dramatic results: *Gimmel is astonishingly important for multiple reasons!*

- a. They have mathematically *proven* that even *dark matter and dark energy* is linked with gimmel: Nepe and Close argue gimmel is in part or completely consciousness. Imagine an age-old problem of *cosmology* being linked with consciousness!
 - b. Close and Nepe even have introduced a math *equation for consciousness*. This is the first ever such equation.
 - c. Additionally, the two scientists have demonstrated mathematically that the atom as we know it, with protons, electrons and neutrons but no gimmel, simply cannot exist as atoms would then just fly apart. This means that they have *refuted* the idea of *materialism* at the level of an atom. The only way the atom could be stable is for its fundamental particles have to have that third substance (gimmel)—they need extra for the mathematics to balance.
 - d. The correlation of the Life Elements in the Periodic Table of the Elements has confirmed expectations in biology: We would expect *the elements of life* to be Oxygen, Carbon, Nitrogen, Sulfur, Calcium, and Magnesium. But strangely Silicon is also one. All these Life Elements are in union with more gimmel than the other reactive elements and in exactly the same proportion! Even more so, the most abundant element in the cosmos, Hydrogen (H1), is in union with the most gimmel consciousness: This is likely because H1 replaces its absent neutron with more ‘gimmel’ equivalent. Next, not surprisingly, comes water, which has more gimmel than any other compound! And phosphorus is not a symmetric element of life: Instead, it is asymmetric, allowing for energy exchanges in the life elements. The abundant noble gases Helium and Neon have the same amount of gimmel as the life elements, but they are not life elements because they’re inert and non-reactive because of their complete electron shells.
 - e. Moreover, remarkably, Murray Gell-Mann won the Nobel Prize, mainly because he discovered the subatomic particles called *Gluons*, regarded as the ‘glue’ for quarks. Nepe and Close have shown that the gluon concept that influences the tiny particles in the nucleus and protons is likely to be wrong. Instead, this effect is due to gimmel, which, by contrast, markedly impacts the electrons and also rotates through the 9 dimensions.
 - f. Moreover, the presence of this container, Gimmel, which almost by exclusion reflects at least in part a broader ‘consciousness’, allows for an appreciation of something that is debated but which Close and Nepe—and even apparently Einstein in his later years— regard as correct: *Mathematics is not just for calculation, it reflects part of our fundamental reality.*
6. What about now? What is the current thinking? After seven years, even the fundamental axioms of TDVP appear to work: Space-Time-Consciousness (extent) have always been tethered together, and the infinite is a central and necessary aspect to our whole, unitary dynamic reality that constitutes TDVP. And from this many different applications and models have evolved.

7. *Is there a role for TDVP beyond Science?* Yes, there is. TDVP and its many tentacles are applicable not only in *Science*, but even in *Philosophy*. Indeed, Neppe and Close have developed a new model called “*Unified Monism*” (UM). This is apparently the first philosophical model based on Science initially. Additionally, UM might be the only versatile ‘mind-body model’: It can work in our real world of 3S-1t experience; in ‘altered states of consciousness’ which is hypothesized to reflect some of these higher dimensions; and, it’s applicable even in alleged survival after bodily death. Each explanation appears to reflect a different level. This means that Unified Monism can incorporate several of the other philosophical models that might be applicable but only relative to a specific standpoint: Idealism, in which nothing else besides mind exists may be pertinent in the context of the infinite alone; and TDVP avoids the problem of the absence of a need to locate where the Descartes Dualistic mind and body interact (because they’re part of the same all-encompassing unit); and Spinoza’s deity in his Pantheism can be incorporated into UM, but UM ‘impacts’ occur not only from a possible divinity, but from other consciousness, plus mass and energy; and the final versatile aspect of UM, is that it still is able to relate to our simple practical 3S-1t world of physical overt experience (but in TDVP, and UM, we recognizing the ostensible materialism is simply part of our existence, and much of this is covert at higher dimensional levels and intruding through the influence of the infinite.

These findings, obviously, make TDVP groundbreaking and a revolution because of its multiple paradigms in different disciplines. Because it is so broad ranging, already at least three different scientists who’ve studied the Neppe-Close work are mentioning a Nobel Prize. One has even verbalized *more than one* Nobel, because several of the findings above independently are worthy of this prize.

Moreover, there are already numerous practical applications in the physical, consciousness and life sciences. There are also hundreds of other testable hypotheses, which should keep scientists busy for centuries. TDVP is a model that has never been refuted. Instead, it has grown enormously over the years, supporting more and more testable proofs and scientific applications.

As Dr Neppe explains: “*Some of our work is definitive because it can be mathematically proven like the 9 dimensions, the atom not being stable without gimmel, and the dark matter, dark energy linkage with gimmel. And some is speculative though supported, such as the links with infinity. The properties of infinity cannot be greatly understood, but we postulate the infinite is responsible for the order in reality and, indeed, for life. If that is so, and we think it is, that is huge!*”

And Dr Close added, “*Please remember that that ‘highest level of proof’ in these cases is mathematics. That is why much of our work is so definitive. Moreover, anyone can replicate our work provided they know the several mathematical techniques required.*” Neppe adds: “*Despite the proof of many aspects, we cannot just neglect the other portions that still require major aspects to be demonstrated. Even more so some components, particularly the exact content of* Neppe V, Close E. *Nutshell on TDVP. IQNJ 8:3, 7-79 September 2016. V10.36*

infinity, remain speculative. In these instances, the proposed ideas still fit, but they're like pieces in a massive incomplete jigsaw puzzle that need to be further studied: Our findings vary in advancement in the number of jigsaw pieces already fitting, but seven years of working together have suggested that the majority of our work is fundamentally correct. We have not encountered a significant stumbling block, which most other models discover early on."

Close amplified: *"This is so much so that our TDVP model has been regarded by some others as the first possible 'Theory of Everything' (TOE). Whether that's so, time might tell."* Neppe had the last word, *"Certainly, TDVP appears, at this point, to be the major competitor: It scores a perfect 39/39 on criteria. Nevertheless, we both dislike the 'TOE' term because it implies all-knowingness and has varied meanings. Our 'TOE' is certainly not all-knowing — only a divinity is. Instead, the concepts fit many 'metaparadigms', extending many aspects of new knowledge: TDVP is a paradigm shift that still works flawlessly in the specifics that it addresses."*

But there is more: A critically contribution to the discipline of the *Philosophy of Science*. This is the remarkable related principle of the Neppe-Close *LFAF* (Lower Dimensional Feasibility, Absent Falsification) technique to test new paradigms and hypotheses in science. The feasibility concept of *LFAF* extends science, and this is very pertinent, inter alia, to the study of extra dimensions, to evolution, to cosmology and to medicine, as well as to studying *TDVP*, itself. *LFAF* is, therefore, separate from the Close-Neppe *TDVP*, but *TDVP* applies *LFAF*.

As Edward Close mentions: *"Extending science and the scientific method is enormously important in today's complex world. Effectively, this technique has been used frequently in science, but it's often labeled as 'metaphysics'. We've been using this in evolution and cosmology and in Medicine and in Psychology, at times, though we perceive that as solid science when it would not fit Carl Popper's definition at all. We haven't formally recognized this application, though tacitly realized it was needed. Imagine Evolution without it, for example."* In effect, Drs Neppe and Close have extended the basic paradigm of science that previously required Popperian falsifiability. *"The data of what has not been falsified can be perceived as part of that gigantic jigsaw puzzle, but each piece must definitively add a little more to that puzzle,"* added Vernon Neppe.

"Does it all work?" To Close *"The proof of the pudding is in the eating: We've tried to emphasize the empirical applications all the time."* And Neppe adds: *"Some of these puddings are already very palatable—they're proven and demonstrated though we or others can add some more spices; some are being cooked at this point —there are already important findings; and some have barely begun—these are speculative and based on our current presumptions."*

"Has it been worth it?" To Vernon Neppe: *"Yes, indeed. This has literally been a labor of love—but a labor, too, of blood, toil and sweat: We've not yet had a single penny of funding, but we're doing all this, sometimes at 4AM, because we 'know' it has to be done. It's our hope that some wealthy benefactor will recognize the value of our work, and allow us time to work full-time at it, with several collaborators. This has been the song we're trying to sing in this world."*

“Who comes first, Close or Neppe? Dr Close explains further: “Neither and both! We regard ourselves as equal first authors on all of this. We have needed each other, because we started as different specialists who came together to pioneer a new discipline—what we’ve called ‘Dimensional Biopsychophysics’.” And Dr Neppe adds: “ We could not have done it on our own! There are just too many components. Metaphorically, if we were circular, we would each be at different rotational points, but with no beginning—that comparison is ironic because it’s like the spinning vortices that are part of our model! We’ve often relied on extending our consciousness, and our apparent creativity.”

B. Historical connection of Drs Neppe and Close:

Edward Close PhD, PE, formally a Mathematician, Physicist, Cosmologist and Engineer, and Vernon Neppe MD, PhD, FRS[SAf] DFAPA, BN&NP, a Neuroscientist, Neuropsychiatrist, Research Methodologist, and now a ‘Dimensional Biopsychophysicist’ involved in mathematical physics and higher consciousness, began working together in 2008.

In these 8 years, despite being seniors working full-time in other professions, they have allocated, without funding, as much as 4000 hours each to TDVP. They regard this task as being the song they’ve been singing for the world, and they still hope to obtain funding for this profound paradigm shift, including for education of colleagues and creative laypersons in books and papers, where others can more easily evaluate these findings and extend them.

Neppe and Close emphasize that *over this time period, neither the fundamental nor the demonstrable provable hypotheses of TDVP have been refuted. Even more so, with each passing year, sometimes every week, their model has become stronger.* Some, such as Drs David Stewart and Adrian Klein, who know their work better than anyone else, regard TDVP as the single most important paradigm shift this century because it is groundbreaking, extending yet not denying the model of the current standard reductionist physical model.

There are now >200 publications which have been reviewed by colleagues (See ‘T. Key Publications with Dr Neppe involving Dr Close’ for a partial bibliography). The ideas generated create topics on either already published Close-Neppe research on the topic or further suggested hypotheses to test. And with each hypothesis advanced being demonstrable, they may get closer or use a little more of that jigsaw puzzle that is available in our experiential physical and likely in our spiritual reality.

C. Key features:

“Triadic Dimensional Distinction Vortical Paradigm” (TDVP) has universally applicable groundbreaking implications. This metaparadigm (broad spectrum “Theory of Everything” across multiple disciplines) contains seven major components:

1. The **fundamental original TDVP model** (2011) involving
 - a. “Consciousness”,
 - b. Higher “Dimensions”, with

- c. *“tethering”* of the dimensional *substrates* —*Space (S), Time (T) and “the extent of Consciousness” (C^e) (STC^e)*. Moreover, in TDVP,
- d. the *quantized finite* interchanges with the *continuous uninterrupted infinity* without requiring any dualistic separation (the finite and infinite are one).
- e. *producing unification of everything*, and
- f. *conforming to the Laws of Nature*.
2. The conceptualization of a quantized **finite** reality as involving **9 spinning dimensions** (9-D) (2014). Higher dimensional domains (collections of dimensions) hierarchically *embed* (contain) lower dimensional domains. These lower ones include our overt interpretations of our limited experiences in three dimensions of space embedded in a moment in time (3S-1t). TDVP does not reject the findings in 3S-1t. The TDVP paradigm just extends the findings of 3S-1t explaining several conundrums that are unsolved (e.g. Cabibbo angle explanation, entanglement, relative non-locality), incomplete (e.g. relativity and gravitation), or ostensibly contradicted (e.g. why there are laws that appear different for quantum, macrophysics, and cosmology).
 3. The **quantized spinning 9-D** are contained in (embedded in) the higher dimensional domains of the transfinite (“tenth plus dimensions”) (2012).
 4. Ultimately, this metafinite (the 9D finite plus the transfinite) is contained in a **continuous infinite**: This is required for TDVP to be correct, because applying the Gödel Incompleteness Theorem, finite reality would be incomplete without an infinite (2011).
 5. This embedding of the quantized finite with the continuous infinite reflects the **unification** of the TDVP model (2012).
 6. Besides *mass and energy*, the application of **“gimmel”**—the third substance that is in union with all subatomic particles—provides stability to atoms and ultimately everything in the cosmos (2015-2016). Without a third stabilizing substance, there would be no world as particles would simply not stay put.
 7. The new **innovative mathematicological applications** allowing many new paradigms to be derived and proven by applying individual hypotheses (2008-2016).

Each of these 5 components appear to be of earth-shaking significance because they modify the fundamental basis of reality allowing entirely new paradigmatic approaches which impact profoundly on different sciences. These models are intercorrelated.

D. Colleagues’ interpretations:

Some comments from colleagues are contained in Appendix A. This is useful because it’s difficult to find peers who can evaluate this work. We quote three in some detail:

- **Dr David Stewart**, PhD, DNM. Physicist, Mathematician: *“I rank Dr. Edward R. Close and Dr. Vernon M. Neppe as peers of the major authors of modern physics and mathematics. I equate them with greats, such as Planck, Einstein, ... Newton.... Their work has clarified, and extended the science and mathematics that these geniuses originated ...I foresee the day when they will both be awarded other honors, such as a Nobel Prize in Physics and (equivalent in) Mathematics.”*
- **Dr Adrian Klein**, MDD, PhD, PhD, Israeli Dimensional Biopsychophysicist and

Consciousness Researcher: *“The 21st Century's revolutionary paradigm shift”; ... “unprecedented brilliance and potentially limitless scientific and philosophical outreach ...yielding a fresh and accurate understanding of various investigation fields of Nature, and opening ... groundbreaking development perspectives for Sciences (emphatically plural!)”*.

- **Dr Alan Hugenot DSc**, Physicist and Engineer: *“When taken altogether, the entire work is worthy of several separate Nobel Prizes”*.
- A fourth quotation series is collective, from SCERS as a group of *eight* including Dr **Joyce Hawkes PhD, FAAAS**, biophysicist: *“...any one of these [31] areas, let alone the combination would be a very substantial reason for Drs Neppe and Close to be recipients of major prizes”*.
- There are then brief comments by seven others in seven different disciplines (first the two leading experts in their disciplines in the world namely:
 - **Stan Krippner PhD**: *“destined to become a classic in the literature on shifting paradigms and worldviews”*, and
 - **Dean Radin, PhD**: *“RBC [is] in a radical multidisciplinary class by itself”*; and then five other prominent scientists:
 - **Alan Bachers PhD**: *“an astonishing and prodigious accomplishment!”*;
 - **John Poynton PhD**: *“encyclopedic ... broad exploratory paradigm for new scientific ideas”* ;
 - **Lance Storm PhD**: *“a paradigm shift that hails in, if not, beckons for, a kind of scientific overhaul and shift in thinking”*;
 - **Helmut Wautischer PhD** *“will shape philosophical discourse ... a profound value to the future of humankind...masterful...”*;
 - **Dr. Frank Luger (Canada)** *“astonishing that you could combine deep scientific notions with mysticism”*.
- Therefore, Appendix A encompasses eighteen scientists and researchers who support the TDVP model.

E. Chronology of discoveries:

2011:

We (Vernon Neppe and Edward Close) proposed our very detailed model, the “Triadic Dimensional Distinction Vortical Paradigm” (TDVP).

- The Neppe Close 358 page E- book *“Reality Begins with Consciousness” RBC1* (First edition officially published in 2012 but produced in October 2011). 45 chapters. 393 references; xlvii (46) preliminary pages so 404 pages). This explained the key features of what others are regarding as a groundbreaking new paradigm shift and it went out to readers in 20 countries and more than 200 scientists. This was the first E-book ever to have a special inscribed message for the readers making it a valuable collector’s item.

1. The most fundamental “deep axiom” in TDVP is that “*Consciousness (extents)*” (C^e) as a measure exists quite separately to Time and Space; and yet these three substrates (Space, Time and Consciousness —STC^e) are necessarily inseparably tethered together. This triad is always in union with each other—“tethered”—like an arm to a shoulder. This never before proposed idea has now been perused by hundreds of scientists in some twenty countries, and it still remains fundamental five years after we proposed it.
2. As indicated by some of the scientists above, this is enough of a breakthrough to change a paradigm that existed for a century: It extends Minkowski’s 1908 concept of “Space-Time”—Space always being in union with Time, creating a new very broad paradigm shift.
3. We provided persuasive evidence that our current model of three dimensions of space in a moment in time (the present) (3S-1t) is insufficient to explain reality (technically RBC1 was available in October 2011).

2012:

- *RBC1 officially published;*
 - *RBC 2 published in January 2012 (355 pages).* Technically a Deluxe and Standard Edition existed; the Deluxe had the inscription by Drs Neppe and Close. Xlix (49 pages of preliminary appendices so 404 pages total; 400 references).
 - *A revised second edition was published mid-2012* (with insufficient changes to warrant a new edition). Although there were significant alterations to these books, the chapter numbers and pages were deliberately kept the same.
1. Based on cogent TDVP empirical and mathematical suggestions, we hypothesized that finite reality had to consist of 9 dimensions. This was linked with the demonstrated findings of 2013.
 2. Neppe and Close also proposed the Philosophy of Science model of LFAF (Lower Dimensional Feasibility, Absent Falsification).

2013:

- *RBC3 (January 2013) published.* 415 pages, 47 chapters, 445 references.
- *RBC 4 (V4.8; April 2014; 437 pages +; 496 references; 50 chapters) published.*

- *RBC Glimpses and Glossary 1st edition published.* Glimpses and Glossary updated the Glossary and Glimpses produced pictures (26 pages) (March 2013)
- *RBC Key Features 1st edition published.* A summary of RBC in a few key chapters. 58 pages + xiv (14) preliminary pages. July 2013.

We demonstrated two related hypotheses on the mathematical derivation of the Cabibbo mixing angle:

1. It can be derived only from a nine-dimensional mathematical model.
2. It supports the TDVP hypothesis that the finite reality consists of a 9-dimensional vortical (spinning) model.

2014:

- *RBC5 published* (Fifth Edition, March 2014, 500 pages, 50 chapters).
- *RBC Glimpses and Glossary*, 2nd edition published. 47 pages.
- *RBC Key Features* 2nd edition published. July 2014. 90+lv (55) preliminary pages.

Close and Neppe definitively mathematically demonstrated and replicated that finite reality, as proposed in 2012, spins specifically through 9 dimensions (9-D)—as measurable extensions of “Time”, “Space” and “Consciousness extent”:

- No other low number like 4, 5, 8, 10, 11 or 26 works for dimensions, though this derivation extrapolating through dimensions, still requires examination of multiples of 9 like 81 or 729 dimensions which could be another solution or possibly even 27.
- The 9-D derivation effectively was shown to exist by deriving the Cabibbo mixing angle—an angle that had befuddled scientists for 50 years (because they needed to use the 9-D model and had not) and subsequently, we replicated the Cabibbo angle in a thought experiment. There were also several other cogent derivations:
 - how intrinsic spin and angular momentum of the electron are markedly linked;
 - the reason for the disappearing electron cloud in 3S-1t;
 - and how 9D together explains what the apparent “half-spin” in fermions is.

Effectively our reality is not just the restricted length, breadth and height (3S) in a moment in time (1t) (and so “3S-1t”). That 3S-1t is only the *overt* experiential part of the existing finite 9D. Finite Space, Time and Consciousness all extend forever as measures through to the transfinite.

- There are also covert dimensions which impact our lives.
- We further postulate, but cannot completely prove, that these proven 9-dimensions likely sometimes consists of 3S, 3T and 3C^E.

- The multidimensional model of TDVP specifically requires 9 discrete, quantized dimensions that rotate through the first to ninth dimensions. TDVP does not involve curlings or foldings as in variants of *String Theory*, nor specifically multiple “Spaces”.

Their (now) 500 page book “*Reality Begins with Consciousness*” was revised again: The first edition was published in 2012—*RBC1*, and is now in its 5th edition —*RBC5*.

2015:

Golden Year:

Furthermore, *in 2015*, Close and Neppe recognized that the ‘*extent*’ of STC^e had a major empirical application and definitively and necessarily incorporated a third substance (“gimmel”) which they regard as mainly or completely “consciousness”, depending on circumstances.

- Gimmel is the massless, energyless third substance involved in analyses of “Triadic Rotational Units of Equivalence” (“TRUE”) which also analyzes mass and energy.
- Gimmel may partly or completely reflect the container (‘*content*’) of consciousness that is linked with mass and energy.
- Gimmel appears to explain what *exists* extremely well, even if much of it cannot be *experienced* directly.
- The demonstration that the atom and the subatomic particles are all in union with a third substance (called gimmel) *throughout existence has universally applicable groundbreaking implications* and constitutes what some regard as the major paradigm shift of this century.
- The application of gimmel, and the techniques involved, changes physics, chemistry, biology and empirical mathematics.
- The applications of TRUE units show why quarks necessarily must come in threes.
- The concept of STC and of MEC with gimmel allows some level of mathematical and empirical appreciation of how the quantized finite and the continuous infinite are not only linked but how the finite and transfinite is embedded in the infinite.
- Gimmel involves earth-shattering paradigm shifts because it changes our basic understanding of reality, of existence and our world.

F. 2016: From Gold to Platinum:

The advances of **2016 relate to the major** discoveries of the implications of gimmel. This impacts our very existence.

- Gimmel and “TRUE” units refute Atomic Materialism. Without gimmel, the atom would fly apart.
- Gimmel appears to be Gluons. This finding changes a fundamental area of particle physics showing that a concept that won a Nobel Prize is incorrect (Laureate Murray Gell-Mann). Gluons are not linked with electrons; gimmel is necessarily: In fact, we have found there is more gimmel in union with electrons (105 for each electron), than any other finite substance.

- Photons, we postulate but cannot definitively prove, also have 105 gimmel units for each photon from the 3S-1t framework, but photons may be in union with an infinite number in the infinite reality. *We propose that transformation might reflect part of the gimmel matrix.* Based on this hypothesis, energy and gimmel transform with different implications in the infinite compared with the different finite dimensional domains. This has to be so if the infinite contains gimmel as a vehicle of consciousness content and that receptacle contains mass and energy too. At the 3S-1t level, this is different.
- Gimmel and TRUE shows the links with the life elements. Hydrogen H is the most abundant element in union with gimmel, then equally O, N, C, S, Ca, Mg, the elements that we would expect to be part of life. Separately, H1 is the most abundant element in the universe, and that is a separate issue pertinent in cosmology.
- Remarkably, perhaps most amazingly, Neppe and Close hypothesized that, if indeed the concept of gimmel is correct, the proportion of gimmel to TRUE in the elements that are most abundant in the universe (predominantly hydrogen with some helium and incorporating others proportionately should be within 2% of the proportion of the combined *volumetric (i.e. cubic)* dark matter and dark energy. The figure is not only within two percent but almost exactly equal (86.01 to 86.09%!!!). Remarkably, gimmel is even in union with or perhaps is Dark Matter and Dark Energy.
- This finding is profound. For the first time in history, there are now the same laws for quantal physics, and these extend all the way through to the cosmological.
- Gimmel demonstrates the requirements for stability to physically survive.
- Phosphorus is asymmetric as an energy element, and iron has the highest amount of gimmel. Helium and Neon have as much gimmel as the life elements but inert and different.
- We can now understand the shells in the Periodic Table of the Elements, a major finding. These findings are amplified below.

G. The future for other scientists:

We recognize the need for any mid-course corrections on the details, and particularly amplifications, so that we can further improve our models.

- TDVP has not only not been refuted, but it is a *much more powerful paradigm than it was five years ago and it is extraordinarily strong in empirical and mathematical support* for the small number of qualified individuals who can and do study it in detail.
- TDVP involves some *600 secondary testable hypotheses* that attempt to answer some of the most cogent questions. These hypotheses can be either through replication of the often mathematically proven phenomena, or in extending knowledge. For example, we can combine more than one new *mathematical* techniques—the Calculus of Distinctions and Dimensional Extrapolation. Moreover, we can use these new applications with novel applications of old ones, such as “Diophantine” equations across 9 dimensions. We can also extend the Pythagorean theorem to a new kind of geometry (“dimensionometry”) or we can apply Fermat’s Last theorem. There are numerous other aspects that can be solved depending on the specific tests.

- We are currently proposing a special role for photons as units of light. There is a vast amount of gimmel in photons in the infinite—we speculate it might be an infinite amount of photons. Because of the photo-electric effects, relative to 3S-1t, photons should convert to a union with the same amount of gimmel – 105 TRUE units—as electrons.
- We may be wrong or only partly correct. Consequently, each of our individual findings should be tested and amplified. This might take a long time (e.g. centuries to complete). But so far, everything is replicable.

H. Future for the continued work of Dr Close and Dr Neppe:

Several of our publications prove solutions to more than 20 different major conundrums of reality. Furthermore, tens of other or subsidiary findings have been proposed. We're, therefore, now writing books for the layperson, as well, hoping to stimulate scientists who are not expert in all these fields (and there are many). We're also hoping for funding. This requires a support system and an influential group might benefit from that support as well.

Such awards do not mean the work is being confirmed as correct, just that this is already a major achievement that needs to be taken seriously and further examined. Clearly, we're looking for collaborators to replicate our work independently and this could be easy because the mathematics proves certain areas. The challenge is just learning this new math which even most mathematicians are not expert in (it requires, inter alia, expertise in Number Theory, the new Calculus of Distinctions, and the discipline we now called Dimensionometry).

I. Two separate significant broad advances:

1. **LFAF:** To allow scientific progress, we (Neppe and Close) developed the fundamental principle of “*Lower Dimensional Feasibility, Absent Falsification*” [LFAF])— a new *Philosophy of Science model* involving feasibility where science can still be applied provided the model is feasible, but has not been falsified (in Popperian terms). *This extends the range of science* because we can scientifically use known “pieces” of a jigsaw puzzle. It can be applied to many groundbreaking findings and paradigms. Whereas other areas of science such as evolution and medicine and cosmology can benefit enormously, so can studies of extra dimensions including TDVP. LFAF extends science in some areas previously regarded as metaphysical. Particularly when applying the various mathematical models, aspects that were previously impossible to solve become scientifically feasible pieces of the jigsaw puzzle.
2. **Precise definitions:** Additionally, we have necessarily carefully and precisely applied our >250 precise operational definitions. Many of these had to be developed and effectively Dimensional Biopsychophysics is a new language, for example:
 - “*dimensions*” are necessarily precise, involving extension and therefore measurable interally or ordinally (consciousness is ordinal and time and space are at higher dimensional levels, too);
 - “*consciousness*” has several different defined faces: When it's a dimensional substrate we refer to “*Consciousness extent*” (C^e) and yet as a component possibly of “gimmel” it is a “*content of Consciousness*” (C^c) similar to other containers like mass

and energy. These are all measured indirectly by *density* involving the extended STC^e measures. We also published a detailed clarification paper on Consciousness.

- “*Tethering*” is more than just a linkage, but an inseparability like a shoulder and an arm.
- Everything in nature is on the move, spinning and *Vortical* in TDVP refers to the rotating or spinning movements across and between dimensions (“*indivension*”). These techniques of the resultant “*vortical indivension*” allow for explanations of many anomalous (“*psi*”) phenomena.
- “Quantized” is specific to the finite: it implies each particle is necessarily composite wholes and integral: they’re discrete like computer “bits” or movie “frames”.
- Moreover, the discrete quantized (pixilated) *volumetric* (cubic) nature of finite subreality is *embedded* (contained) in the *continuous infinite* reality. The finite and infinite therefore need not meet because the one is in the other: The continuous infinite involves the same STC^e substrates. However, at that infinite level, we propose that Space-Time is entirely embedded in the in extent of Consciousness (C^e). This markedly contrasts with our physical 3S-1t reality where Consciousness is conventionally conceptualized as largely latent other than in its direct neurological expressions, and effectively mainly contained in our Space-Time.

This may be a reason why two contrasting mind—body (brain)(matter) philosophical Monistic models arose: Some Materialists regarded consciousness as an epiphenomenon of “brain”; and some Idealists denied the real existence of matter, regarding it as simply derivative of, or epiphenomenal to, mind. Applying the Neppe-Close TDVP model and its secondary philosophical ‘mind-matter’ model, neither the materialist nor idealist models is correct. However, each mind-matter model can technically be comprehensible, by only when applying them as limited and *relative* to specific *frameworks* of the Infinite Mind or the Physical 3S-1t Matter.

- The infinite is involved with ever present *multidimensional “order” (ordropy)* (as opposed to “entropy” in the finite) and could explain even continued existence and so-called “non-local phenomena” which are recognized as only “*relatively non-local*” from a specific “*observer*” “*framework*”.

J. Key findings to accentuate:

We list *eight remarkable key esoteric examples* of scientific findings begging for future applications.

1. “*Close’s Conveyance Equation*” is replicable and incorporates consciousness directly into the equations of physics, but the empirical proofs behind it may be amplified in many ways. It specifically can focus on the 9-dimensional model and is a Diophantine Equation. We now have an “equation of consciousness”.
2. *Relativity beyond 3S-1t*: The TDVP model also allows for *extending well-known models of physics such as Einsteinian relativity* beyond 3S-1t.

There are six other special areas that particularly may need further examination because of their enormous implications:

1. *Extensions of the Cabibbo angle* type of research because this has implications for fermions and 9D;
2. *'Intrinsic electron spin'*: For decades, physicists have referred to the property of the 'half-spin' of fermions. They recognized that this 'half-rotation' could not be 'real' and so regarded it as a theoretical construct. However in 9D, the rotation *is* real because when electrons are intrinsically rotated eight times via their 'angular momentum' through dimensions 1 to 9, this unexplained construct is clarified enormously as there are four complete rotations.
3. *The equations of Consciousness*: This is because, finally, not only can we incorporate energy, mass and speed of light as in $E=mc^2$, now there is a way to incorporate 'consciousness' for the first time.
4. *'Non-locality'* becomes pertinent as well. This has become of great relevance to solving phenomena such as psi: However, understanding non-locality requires utilizing concepts such as 'relative to', 'from the framework of', and 'observer'.
5. *The new atom*: Also even without Gimmel, Neppe and Close showed two other disproofs of our current model of the atom based on the Periodic Table of the Elements.
6. *The new math*: The mathematical techniques used are also new paradigms and can be tested. We can mathematically prove many of the groundbreaking findings, but replication, particularly independent replication by others, is important for any major paradigm shift.
7. *Examples that are very important and more difficult to research further*:
 - In TDVP, the infinite always potentially *impacts* the finite, and vice versa. This impact can influence mass, energy, space-time and the many forms of consciousness content and extent. This bidirectional impact from the infinite may be potentially studied by examining *order and life*.
 - This creates a *social system* and the model allows for *free will* and *meaning* in our lives.

K. The Unification of Science and Spirituality.

1. It could be argued that the fundamentals of all true models should endure. Therefore, a cultural or spiritual group that had lasted millennia would 'know' it was correct. This applies for TDVP and gimmel because after RBC1 was written (and therefore independently) we became aware that the philosophical aspect of the so-called spiritual model of *Kabbalic mysticism*. Kabbalah appears to be a replica of TDVP (without the mathematics and the science): The key elements of TDVP, namely consciousness, infinity, dimensions, tethering, STC separation, vortices are also in Kabbalah, but the mathematics and science applies what even could be called a scientific model of Kabbalah. According to some sources, Kabbalah has been around for millennia, and it supports the intuitive awareness of what could be known truths.
2. TDVP also allows the conceptualization of reality as a single unit producing secondarily the unique philosophical model of what we call "*Unified Monism*" (*UM*). This provides a versatile unified model that can explain the unification of both physical realities and extended consciousness and is based on a scientific justification namely TDVP. UM derives from science

and mathematics. UM was objectively compared with the several other major mind-body philosophical models (Table 1): It appears to be the only one that is so versatile that it can fit our physical world as well as existences including hypothetical survival post-mortem and infinity.

3. In 2011, with the assistance of other scientists and developers of so-called “*Theories of Everything*” (TOEs), Neppe and Close delineated 39 criteria (Table 2)

- With colleagues’ help, they examined 24 TOE models.
- All but the Neppe and Close models scored less than 20/39.
- TDVP, itself, scored a perfect 39/39 as would behoove a TOE that worked. Close’s original ‘Transcendental Physics’ scored 23/39 and Neppe’s ‘Vortex N-Dimensionalism’ 27/39. By comparison, ‘Standard Model of Reductionist Physics’ scored 13/39
- However, Close and Neppe did not ignore the findings of Physics. They simply incorporated the definitive findings of modern physics amplifying the limited dimensions of 3S-1t that we experience physically, but they did not in any way compromise current thinking which is relative to our 3S-1t experience. 3S-1t is just part of the greater whole.
- TDVP therefore does not require rethinking about everything, just extensions of unexplained conundrums and explaining some contradictions. Neppe and Close are extending this to 50-60 TOE criteria, and it appears TDVP still scores perfect scores (i.e. there are no contradictions but there are questions such as Quantum Gravity that are not pertinent and not yet examined).

L. Hypothetical perspectives:

TDVP also suggests testable hypotheses to extend knowledge from what are currently strong data sets (e.g. the primary deep axiom in TDVP relating to STC^e). By these means, *gimmel* can be examined by applying 44 individual hypotheses including replication of the previous Close-Neppe work (RH), addition of new testable hypotheses (TH) ranging from easy and short to complex, and also at least recognizing the limits of challenges (CH). These 44 show how all these hypotheses are so interrelated, indeed, unified into one single concept. They all link with the content receptacle of *gimmel* in the context of “Triadic Rotational Units of Equivalence”. Importantly, these ideas show how the applications can be groundbreaking in many different ways: Indeed, almost every hypothesis even on its own would constitute major breakthroughs—plural because they impact numerous disciplines.

M. Perspective to the above.

The Neppe-Close model of Triadic Dimensional Distinction Vortical Paradigm” (TDVP) emphasizes two major components. *Extent* and *Content*. The *extent* involves dimensional substrates namely, the triad of Space, Time and Consciousness extent (STC^e). STC^e is particularly pertinent when these measures are based on empirical data—the content.

The content is now the focus below and deals with ‘*gimmel*’ and ‘TRUE’ units and other components like atomic electron shells. ‘*Gimmel and TRUE units*’ are critical subsets of the broader TDVP model because they reflect empirical data on the nature of reality.

The empirical *content* aspects reflect mass, energy and a mass-less, energy-less third substance, that we call ‘gimmel’ (MEG). MEG reflects what is *contained* in our reality, not only during our waking physical experience in the *extent* substrates of length, breadth and height in a moment in time (3S-1t) but across all dimensions extending to the infinite. Gimmel, TRUE, Mass and Energy give the meaning to the extent measures of Space, Time and Consciousness-*extent* in TDVP. But our current model of three dimensions of space in a moment in time (the present) is insufficient to explain reality. Instead, the model we have developed involving 9 finite spinning dimensions, and which incorporates a third substance (gimmel) linked with mass and energy, appears to explain extremely well what exists, even if much of it cannot be experienced directly.

N. Gimmel revisited:

Gimmel is used as a non-prejudicial term for that third substance, but because there is both no other apparent alternative and mathematical, logical and empirical support, we have strongly proposed that *gimmel reflects Consciousness content (C^c) in part or in whole.*

We have tested many of the above closely related hypotheses through a series of related research programs reflecting several different aspects relating to how we can apply gimmel to existence and reality. These therefore are major paradigm shifts, and involve groundbreaking findings, if proven and that appears to be so. Moreover, we list below the fertile areas that can be studied further.

1. Our data shows that, at this stage, by applying mathematics to empirical data, we have little doubt that this mass-less energy-less substance of *gimmel* exists. This appears to be of earth-shattering significance. Particularly in conjunction with the other data, we have further persuasive evidence that our current model is supported. Therefore, there is likely a second triad of MEG—mass, energy and gimmel.

We have, moreover, proposed that everything in the finite is quantized—nothing is continuous. This has cogent empirical support, going back to Max Planck. This means that we cannot have e.g. half an atom or a half electron. In effect, such quanta are not just points but volumetric. This means that *analyses should be based on 3-dimensional cubic structures, not linearly.* This is extraordinarily important because the mathematics appears to closely reflect the nature of reality well as postulated originally by Pythagoras and Plato, and our findings have not yet been contradicted.

2. Amazingly, our calculations also *prove that materialism at the atomic level is refuted.* Specifically, the atom is volumetric and integral and so are the subatomic particles (electrons, protons, neutrons and quarks). As we are conventionally taught at school about them, atoms would be mathematically unstable. This requires demonstrating when applying only one method. However, the instability is demonstrated applying three different procedures (the only ones available to examine):

- a. Volumetric analyses of the atom.
- b. Mass and energy of the atom.
- c. Mass-energy equivalence applying “TRUE unit equivalents” (TRUE unit) analyses.

In effect, our data cogently demonstrates that the atom cannot be stable unless there is an additional third substance (gimmel). Atoms, mathematically, have to be very precise: They need to be whole (we cannot have half an atom) and this can be done but requires, what was previously unrecognized, namely the correct combinations of very specifically derived gimmel scores being added. Applying gimmel, we created a unit score for the electrons, and recognized all other structures must be quantized integers and they should be calculated by volume (“*Volumetric Equivalence*” or VE) applying the new Close-Neppe “*Triadic Rotational Units of Equivalence*” (TRUE) units. Unless we incorporate gimmel in the correct quantities into the atom, mathematically atoms would, as indicated, just fly apart—atoms need to be stable to exist permanently: They would be unstable without a union with gimmel.

3. We have calculated such scores in ‘*TRUE unit equivalents*’ for the gimmel unions as protons (7), neutrons (16), electrons (105!). We also have calculated the scores for quarks: There are 2 up-quarks and 1 down-quark in protons; there is 1 up-quark and 2 down-quarks in neutrons. Remarkably, one would think that every quark would have the same number of gimmel units, as we see that for electrons. However, each up and down quark scores differently, ranging from 1 to 8) (Table 3). We propose that these *triadic* differences are critical for existence and stability of the subatomic particles and this differs from the so-called “particle soup” including the Higgs–Boson which is ephemeral and unstable. Gimmel reflects a stable substance.

4. The *gimmel and TRUE unit* properties of specific elements yield hypotheses for further research:

- a. Remarkably, gimmel is *functionally* higher in TRUE proportion to any others in what empirically we know as the **life elements** (*H, O, N, C, S, Ca, Mg*). These elements are all also symmetrical, and amazingly, when empirically calculated, they are *all multiples of 108 cubed* applying special VE equivalents (“TRUE units”).
- b. Moreover, two **inert gases, He and Ne**, have special properties.
- c. We found that **Phosphorus is asymmetrical we think** due to providing energy sources and this is linked with the function of extending energy. But we must now reconcile that role of gimmel in compounds containing P like ATP and AMP in mitochondria.
- d. **Iron** has the **largest** union of gimmel. We postulate this is because it’s a transporter of oxygen.
- e. Surprisingly the math yields another testable hypothesis, that **silicon** must be an **element of life**.

5. Moreover *hydrogen*, the most basic and stable element, requires a third substance to compensate for its lack of a neutron—we call this “*daled*” and we postulate, but cannot yet prove, that *daled* could be a form of gimmel.

6. Most intriguing is that the volumetric proportions of *dark matter plus dark energy in the cosmos* (using the “*Planck Probe*” figures) is identical with the *ratio of gimmel to TRUE unit*

proportion of the most abundant elements in the cosmos (H and He). *Based* on the available data our results empirically are between 86.0% and 86.1%! This is amazingly close: We had proposed a very narrow range for the “alternative hypothesis” to be confirmed ($\pm 2\%$ variation), yet our findings involve variation to the less than a thousandth.

This is a fertile area for further exploration as the implications are so huge: This implies, too, that there is likely *gimmel at every level of our universe* and that *no longer do we have separate exceptional laws for quantum physics, macrophysics and cosmology, but they're all the same when we incorporate gimmel and TRUE!* This should support gimmel being *everywhere* as our TDVP-TRUE model applies. *This revolutionizes thinking* because no longer would we have rules for quantum physics, for macrophysics, and for the cosmological. In this kind of instance, the same laws of nature would apply!

7. Iconoclastically, *gluons*, the particles that won the Nobel Prize for Gell-Mann, produce instability alone and they may not exist with the postulated properties. ‘Gluons’, instead, appear to likely *resemble the properties of gimmel*. But gimmel can exist whereas gluons do not because *gimmel is also in electrons and requires the 9-dimensional model*. Nepe and Close have effectively refuted a Nobel finding and justified our own.

8. We have been able to calculate gimmel for all stable particles except the **photon**. The light or radiant energy may be a key component but difficult to score particularly with different light spectra. The gimmel score for photons could be infinite, though previously applying because of Einstein’s photo-electric effect we had proposed the same gimmel score as the electron (105) (possibly by the time the photon reaches the finite or 3S-1t certainly).

9. **Water** is the molecule that has the most gimmel: There are some major questions for further research:

- Is there more or less gimmel in the fourth phase water (*EZ water*)? Logic, empiricism and mathematics do not yet agree here.
- If the *bonding* is covalent then there should be less in EZ water, and yet it appears the most abundant water in the body.
- Is there a unique bonding e.g. Hydrogen bonding in the hydroxyl of water?
- And do water and other chemicals allow insights on how *bonding* of compounds impact gimmel? This is particularly pertinent when there is daled in Hydrogen instead of a neutron.
- Effectively, what happens to gimmel in ionic and covalent *bonding*?

10. Finally, some **questions that will require intensive empirical analysis**:

a. *Can we calculate the gimmel values of the units (adenine, cytosine, guanine, uracil) in the DNA and RNA helix and can we combine these?* We postulate that DNA and RNA are stable but not life compounds as they require the energy of phosphorus.

b. What is the pertinence of **electron shells** in the context of gimmel? We have empirically found that there are vast differences between shells number 2 and 3 for example, and chemists

may find the data challenging and be able to amplify these.

c. Do the gimmel score differences in union with the 6 stable quarks in protons and neutrons imply not only a *quantitative difference*, but also a *qualitative one of meaning*? This is compatible with different kinds of gimmel consciousness in the finite: If so, it could be that a directed meaningful informational wisdom exists. This would not just be the same kind of meaningful phenomenon in every particle, such as an electron.

O. Directions for the future:

We hope to extend our research work. This involves testing *whether gimmel and TRUE unit derivations allow stability of particles at all levels: Quantal, macroscopic and cosmological and in the life elements (including Hydrogen and even Silicon as special cases)*. The specific areas that need evaluating are:

- a. Analyses of the properties—strengths and limits of carefully chosen particles, elements, molecules, as required.
- b. Targeting the “why” and the “what” questions.
- c. Analyses of the separate properties of gimmel and of related particles. These require re-examining and postulating key paradigmatic, currently unresolved problems in particle and cosmological physics and extending through to dimensional biopsychophysics. Each hypothesis has separate emphases, but the underlying models remain theoretically intercorrelated enough to warrant a single research proposal performed more efficiently under the same research umbrella. An advantage that Drs. Neppe and Close have in extensions of the area of gimmel is they can apply their already pre-acquired steep learning curve and specialized knowledge and expertise and collaboratively lead the detailed data re-examinations and problem solving, possibly providing short-cuts for the new tests.

Given the findings already, involving those research proposals that have already been proven, these areas are already groundbreaking. Whereas reinvention of the wheel may not be necessary, it might be simply because of the dramatic nature of the paradigm shifts that change our whole perception of reality.

We recommend to always apply the usual appropriate research standards: Literature review including the pertinent Neppe-Close findings, detailed methodology including as needed representative populations, controls, and predefined parameters with appropriate statistical comparisons should allow our already proven mathematical hypotheses to be easily replicated. This is provided, of course, the reviewers have the requisite expertise in the new areas of mathematical logic including Close’s Calculus of Distinctions, higher dimensions with Dimensional Extrapolation, and Dimensionometry, plus Number theory including Diophantine Equations, Fermat’s Last Theorem and Extensions of Pythagorean theorem, plus ordinals applied to the transfinite and infinite and Consciousness.

Moreover, if several of these proposals were replicated, that could demonstrate the unity of the paradigm shifts and if they impact different specialties, that would be metaparadigmatic. This is why these findings are such remarkably new findings and directions. But there is much more to be done. All collaborative research may shed further light on the broader question in this proposal namely that the numerous properties of gimmel support the hypothesis that it is a

groundbreaking discovery.

Effectively, we can replicate or test some 40 plus further interrelated hypothesized areas and sometimes apply information to amplify and extend TDVP. Some hypotheses, often relating to infinity, can be eliminated as simply impossible to test at this time but possibly allow for LFAF to fill in jigsaw pieces. Most of the others are all straightforward, relatively simple empirical mathematical derivations applying the specialized mathematical logic needed (e.g. calculus of distinctions, dimensional extrapolation, Diophantine equations, Cantorial ordinals and infinites. Proof of even one research proposal would be groundbreaking). Several replications should further consolidate and extend the already demonstrated unity of the paradigm shifts and if across specialties, that would be metaparadigmatic shifts—which is why this is unified. Moreover, the further research potentially might produce remarkably new findings and directions which can provoke PhD and further studies, a reason why books and publications in this area are also important to incorporate. The specialized disciplines of mathematics, quantum physics, cosmology, systems theory, biology, consciousness research, philosophy and philosophy of science are particularly involved.

P. Obvious practical implications:

The Neppe-Close “Triadic Dimensional Distinction Vortical Paradigm” (TDVP) *is a metaparadigm involving numerous different paradigm shifts. It is complex because the nature of reality is complex and it reflects reality. To this time, it has not been refuted, but has, indeed, grown over many years with more and more applications and potential applications. It impacts multiple disciplines. The model is the equal contribution of Vernon Neppe MD, PhD, Fellow of the Royal Society (SAf), and Edward R. Close PhD, PE, physicist, mathematician and engineer.*

The information below summarizes about two dozen of the key groundbreaking paradigmatic findings of the TDVP model, but in the context of the practical significance for researchers and reality. These are examples only. The practical applications of TDVP are so far reaching that it will take centuries to extend all of these. We apologize for listing so many of these basic applications. However, fundamental truths should have applications across tens of disciplines. The Neppe-Close TDVP model fits that criterion, is extraordinarily versatile, and might, with respect, reflect a model that portrays fundamental truths.

I. THE FINITE AND 9 DIMENSIONS:

The 9-dimensional (9D) finding and the extensions of TDVP including the infinite can be applied to explain many of the conundrums of Physics and of Consciousness Research.

1. Physics: TDVP throws important light on:

- **Unification of nature:** TDVP unified extensions of physics: No longer are there rules for quantum (theoretical) physics, macrophysics and cosmology. They all obey the same laws!

- **Quantum physics:** The approximations in Newtonian calculus have led to limitations in quantized discoveries. This combined with the non-recognition of a 9-dimensional finite spinning model might partly explain why Nobel Laureate Richard Feynman regarded quantum physics as strange and incomprehensible.

In TDVP, quantum physics becomes comprehensible because we are seeing the much larger picture. This is why we have discovered the derivation of the Cabibbo angle by looking outside the box to 9D.

- **9-dimensional spin (9D):** Effectively, the 9D discovery has made our laws of reality much wider. 99.9% of findings in physics can be understood when applying our conventional 3S-1t. But 0.1% cannot: By applying a 9D model mathematically, we can now derive the Cabibbo angle, explain intrinsic electron spin and angular momentum, and understand the disappearing electron cloud. Moreover, we can now understand the supposed “half-spin” of fermions: spinning through Dimensions 1 to 9 (8 rotations) involves four complete 360 degree rotations.
- **Copenhagen type interpretations:** The relative roles in explaining the *observer* in quantum interpretations of physics (e.g. as opposed to the 20 variants, the most well known of which is the so-called ‘Copenhagen interpretation’).
- We can predict fundamentals in atomic structure:
 - Why quarks must combine in threes,
 - Why gluons cannot fulfill their promise as an extra substance besides quarks, and yet gimmel can, and indeed may be gluons.
 - Why that third substance, gimmel, must exist.
- **Non-locality:** Understanding non-locality begins by appreciating different levels of “*relative non-locality*” in both physics and consciousness sciences.
 - In physics, the mechanisms of entanglement are comprehensible, applying both higher dimensional models and gimmel.
 - In Consciousness Sciences, the fundamental mechanisms of *every* psi phenomenon can be understood.
- **Cosmology:** The findings that the ratio [Gimmel: TRUE] is almost exactly the same as [(volumetric Dark Matter + Dark Energy): Cosmos] raises profound questions about the true nature of consciousness, and of reality. We may have stumbled upon the biggest mystery of all: Dark matter and dark energy— 95.1% of our cosmos—appears markedly and necessarily interlinked with “gimmel”. Even more so, in September 2016, Neppe and Close confirmed their research hypothesis that Dark Matter /Dark Energy proportions closely approximate Gimmel in the Electrons/ Gimmel in union

with the Nucleon Quarks. This suggests Dark Mater and Dark Energy may be ‘contained’ in the atom, but that that ‘containing’ is through a 9-dimensional model, and cannot be through just 3S-1t further supporting the utility of the 9 dimensional model: It contains 3S-1t —our overt experience.

- **Cosmological travel:** There are other practical but far-reaching speculations. The concept of “indivension” (moving across and between dimensions) for example, may allow for a different kind of travel across and between galaxies. Or it may allow for communications across dimensions facilitating alleged extracorporeal and extraterrestrial communications. Multidimensional time and movement across higher dimensions may totally change space travel as we know it.

II. THE FINITE SUBREALITY:

- **Biology:** The implications of TDVP and gimmel for the life elements for Biology and the Life Sciences are enormous.
- **Materialism refuted:** We have demonstrated that the atom cannot just consist of protons, neutrons and electrons. This refutes the basis of atomic materialism: It is simply mathematically impossible.
- **Dimensional Biopsychophysics:** The refutation of atomic materialism, necessarily requires an alternative. Effectively, to explain why our atoms do not fly apart requires extending the science of physics, to extra dimensions, and appreciating the links with biology, Consciousness research, and psychology. Neppe and Close called this new discipline “Dimensional Biopsychophysics” (DBP). In itself, DBP provides an entirely new way of examining physics, chemistry and biology. DBP requires applying a content of Consciousness namely, “gimmel”. Gimmel is in union with everything and manifests as a massless, energyless substance in our living experiential 3S-1t *dimensional domain*.
- **Consciousness Sciences:** We can now understand why Consciousness is a key to reality. This has huge implications in Consciousness Research, Dimensional Biopsychophysics and in the studies of psi. But we need to be careful in defining it. We (Neppe and Close) have recognized that “Consciousness” is not a unified term, but involves four prongs:
 1. existential components (extent, content and impact);
 2. paradigmatic elements (quantal-qualit, neurological, psychological, extended-higher consciousness);
 3. informational – meaning; and the
 4. cybernetic (input-central-output) computer model.
- **Consciousness Research:** Within the context of DBP, is an entirely new discipline involving that gimmel receptacle of consciousness. Gimmel is combined with “*volumetric equivalents*” of mass and energy, such as

protons, neutrons (both of which contain quarks and other subatomic particles) and electrons making up the atom. These make up the “Triadic Rotational Units of Equivalence” (“TRUE units”) which are of critical relevance because we now understand the content receptacle of existence (mass and energy always in union with gimmel). Space, Time and Consciousness extent (STC) are the dimensional substrates, but that “STC extent” only has relevance in the context of the mass-energy-consciousness content (MEC). Moreover, besides extent and content, there is a third major existential prong, namely **“Impact”**, which we also call *“intent”* or *“influence”*. This is bidirectional, indeed, multidirectional, and allows us to interface with our environment.

- **Systems theory:** “No man is an island entire of itself” (John Donne). In the social sciences, we’re aware that we are not just biological individuals. TDVP incorporates this. We are *“ethicospirituobiopsychofamiliosocioethnicocultural”* individual-units, and interface at all these levels. TDVP does not just deal *“vertically”* across and between dimensions. It also applies the *“horizontal”* approach of these *“individual-units”* (individual, group, social etc.) of the different *“systems levels”* being taken into account. Everything continually involves rotating movements (*“vortices”*) through, within and between dimensions. We call that *“vortical indivension”* and it is a fundamental way to explain many aspects of psi phenomena.
- **Chemistry:** The implications of gimmel for the whole perspective of chemistry are profound.
 1. We can explain why the different electron shells in the Periodic Table of the Elements and why they exist as they do. (Table 4 shows the overall scores in TRUE and gimmel of some key elements).
 2. We can understand the prevalence of the most abundant elements like Hydrogen (H1, H2) and Helium (He). (Table 5A, B, C).
 3. We can clarify the relevance of valence, of elemental stability, of symmetry, and predict which elements are relevant in life. (See Table 4)
 4. We can understand the gimmel commonalities of the Life Elements (H; also C, N, O, S, Mg, Ca). (See Table 4)
 5. We can demonstrate that the elements of life that are symmetrical and stable: We can predict another, Silicon (Si); we can understand why water has the most gimmel of any compound; we can appreciate why Phosphorus is an energy element; and we can explain why iron is a transporter of a life element (oxygen).
 6. We can predict models of the pertinence of DNA and RNA for life, meaning and energy. This could fundamentally change biology.

7. We can clarify why Hydrogen (H) does not need a neutron. That lack is, indeed, why that makes H the element with far the most “gimmel” equivalent (or what we’re calling “daled” because we don’t know if the neutron substitute is the same “gimmel”).

III. THE INFINITE AND THE FINITE:

When combined with the Neppe-Close work *integrating infinity and unifying the finite with the infinite*, this allows for understanding of several conundrums:

- **Reality:** Existence as differentiated from experience is critically important. Experience is *relative* to the dimensional domain one is in: While alive, our overt reality is 3S-1t because that is the *framework* we experience. Experience is our *overt* reality. The remaining finite discrete dimensions plus the infinite continuity still impact and influence us, and that is our *covert* reality.
- **Psychical research:** Alleged survival after death is necessary in TDVP, and even the model of reincarnation can be explained via TDVP.
- **Philosophical phenomenology:** The experience-existence dichotomy also has relevance in Kantian philosophy. We differentiate the “*phenomenal*” which is experienced from the “*noumenal*” which exists in itself. However, given that in TDVP, the infinite is always part of the reality, and reality obeys the laws of nature, what is “*noumenal*” could be argued to still be part of the observation of a higher divinity.
- **Spirituality and Theology:** In TDVP, the infinite still fits the extended Space, Time and Consciousness but those substrate extensions re “without end” (“*ein sof*”) in the infinite. Nevertheless, the laws of the infinite are still within that vast unending extension of the laws of nature, which therefore incorporate so-called “*miracles*” and the “*supernatural*”. These miraculous events are experienced as miraculous because they turn out to be outside our experiential dimensional domain. Yet they conform to the laws of nature, but phenomenologically and experientially are *interpreted* as “*miraculous*” because of their specific occurrence in space, timing at that exact moment, and profound “meaningful relevance” in consciousness.
- **The Science- Spirituality Unification:** Effectively, TDVP accomplishes the long sought after unification of science with spirituality. This is why *Kabbalic* mysticism scores so high in the (RBC published) Theory of Everything model at 19/39. TDVP adds the scientific and mathematicologic elements, and careful unique and specifically defined features, allowing the TDVP paradigm to be explained across multiple specialties, to a perfect 39/39 score. This is why TDVP is named a “*metaparadigm*”.

- **Philosophical (mind-body):** The philosophical mind-body debate jumps to a new high for two reasons when applying the Neppe-Close Unified Monism philosophy:
 - a. For the first time there is a way to explain practical 3S-1t regular daily reality plus psi phenomena including survival after death.
 - b. This Unified Monism philosophy is the first that is secondary to science, a consequence of a paradigmatic model in this instance TDVP.
- **Meaning in science, spirituality and philosophy:** We postulate meaning may be associated with gimmel reflecting *meaningful consciousness* in the finite. We speculate that gimmel flows from the infinite, possibly via a vortical gimmel matrix. It may be linked with photons which at that infinite level contains an infinite amount of gimmel; whereas in the finite, photons are in union with the same amount of gimmel (105 TRUE units) as electrons. The concept of *meaning* is enormously relevant in psychology and consciousness research. There is indirect, but cogent support for this: As dramatic as the refutation of atomic materialism is, the same might ultimately apply to the finding of *different* gimmel values for the six stable quarks because it may imply individual meaningful differences.

IV. MATHEMATICS AND LOGIC

- **Mathematical Number Theory:** The subdiscipline of “Diophantine Equations” is a subcomponent of Number Theory. This area deals with integrals only and is very applicable for our finite reality because everything is quantized and volumetric. Diophantine Equations have allowed Neppe and Close to re-conceptualize these quantized volumetric aspects of the discrete finite, and apply cubes such that calculations, and indeed reality remarkably fall into place, as if there is template—a structure—to our existence.
- **Mathematics of consciousness:** For a century, Consciousness Researchers have tried to find a way to incorporate Consciousness into the equations of physics and science. Perhaps the most dramatic finding is to develop an equation for consciousness. In that way, $e=mc^2$ is extended. We call this the “Close’s Conveyance equation” which is part of the Conveyance Expression: $\sum_{n=1}^m (A_n)^m = A^m$ yielding $(X_1)^3 + (X_2)^3 + (X_3)^3 = Z^3$ for triplets when $n = m = 3$.
- **Mathematical empiricism:** Because of the requirement of “content” to make “extent” meaningful, and adding even Einstein’s awareness late in his life that Space and Time were only pertinent in the context of Mass and

Energy (and hence $e=mc^2$), we argue that mathematics is directly part of reality, not just a way to do calculations.

- **Mathematical logic:** The “*calculus of distinctions*” (CoD) is a new method of mathematical logic developed by Dr Edward Close and extended by Close and Neppe. Effectively, because our finite reality is quantized and volumetric, we cannot keep moving to less and less forever: Infinitesimal Newtonian-Leibnizian calculus is wonderful when miniscule approximations don’t matter, but there remains a bottom volumetric component, so that a new calculus is needed. This Calculus of Distinctions should specifically be applied to any finite reality and has enormous implications when so done.
- **Dimensional extrapolation:** Close and Neppe have described a method of moving across dimensions by “extrapolation” of rotations. This is sometimes much easier for what we’re doing than many of the other applicable multidimensional mathematical techniques such as Hamiltonians or Lagrangians, Riemann Algebra, Hilbert Space and Euclidean Geometry. We also apply *multidimensional scaling* and extend geometry to “*dimensionometry*”.
- **Infinity and mathematics:** The work of Georg Cantor and of Gödel’s incompleteness theorems has been extended.

V. PHILOSOPHY OF SCIENCE:

The proposal of Lower Dimensional Feasibility Absent Falsification (LFAF) is a dramatic breakthrough in the Philosophy of Science and indeed for scientific endeavors, including but not limited to, *Medicine, Evolution, Cosmology, Psychology, Parapsychology, Dimensional Biopsychophysics, Consciousness Research, Creativity*, and indeed to paradigms such as TDVP.

Q. Videotapes and Blogs and more information

A starting point is www.vernonneppe.org/presents.html. Particularly pertinent may be the eight posted YouTubes involving Dr Jeffrey Mishlove (April 2016) interviewing Dr Vernon Neppe, directed for the intelligent layperson.

Directly below is an important series of *Science and Spirituality TV* by Dr Edward Close also on YouTube. This reflects a whole science and spirituality series.

There are several other You-Tubes with different levels of complexity (listed as such and lengths).

Also there is more detailed information on some of these findings such as the Cabibbo mixing angle (the original mathematical proof of 9 dimensions)

Also on VernonNeppe.org are various aspects of our research.

You may want to read more at www.brainvoyage.com. This includes our e-book "*Reality Begins With Consciousness*" now in its fifth edition.

There are also many blogs by Dr Close on <http://www.erclosetphysics.com/>

More information: is summarized under: <http://www.vernonneppe.org/research.php>. This includes relativistic understanding, freedom of choice and will and its restrictions, development of new models, applications of psi given that a model is proposed, studies of altered states of consciousness, creativity, survival, integration of multidimensional models and re-examining mathematical constants.

R. Speaking engagements:

Dr Vernon Neppe has lectured in a dozen countries, and performed far more than 1200 invited lectures. He has appeared on TV, radio and media interviews worldwide, and given grand rounds in more than 90% of USA medical schools. He talks on tens of different topics to a wide variety of audiences. He has repetitively been an invited keynote – plenary speaker at international conferences involving Consciousness Research.

Dr Edward Close is also a very gifted and experienced speaker. He, too, has lectured internationally, extensively, on a wide variety of topics, and to multiple different audiences, and has interacted with the media and has performed many live radio interviews.

Recently, Drs Close and Neppe have been performing very successful whole-day workshop symposia on TDVP in the USA and Mexico. *This allows funding of their speaking engagements at these conferences because the workshops can generally be the day before or after the conferences.*

Both continue to be invited to do Plenary and Keynote addresses in many international organizations of Consciousness and Psi research.

Drs Neppe and Close can lecture at any level, to any audience.

They are now writing books for the layperson.

Recently, Drs Close and Neppe have been performing very successful whole-day workshop symposia on TDVP in the USA and Mexico.

Drs Neppe and Close can lecture at any level, to any audience.

They are now writing books for the layperson.

Examples of Dr Neppe's Keynotes on TDVP

- *Keynote address.* June 2016. Academy for Spiritual and Consciousness Studies, Chapel Hill, USA. Dr Close was a Plenary speaker, too.

- *Keynote address*. May 2013. Academy for Spiritual and Consciousness Studies, Virginia Beach, USA.
- *Plenary Address and Workshop*, February 2013, Opening Plenary Address, First International Conference on Science and Spirituality, Puebla, Mexico. Dr Close was a Plenary speaker, too.

Symposia and Workshops:

- *Symposium/ Workshop whole day (with Edward R. Close PhD)*. First International Conference on Science and Spirituality, Puebla, Mexico.
- *Symposium/ Workshop whole day (with Edward R. Close PhD)*. June 2016. Academy for Spiritual and Consciousness Studies, Chapel Hill, USA.

International Schedule (examples of presentations by invitation)

Keynote address. June 2016. Academy for Spiritual and Consciousness Studies, Chapel Hill, USA.

Symposium/ Workshop whole day (with Edward R. Close PhD). June 2016. Academy for Spiritual and Consciousness Studies, Chapel Hill, USA.

Keynote address. May 2013. Academy for Spiritual and Consciousness Studies, Virginia Beach, USA.

Plenary Address and Workshop, February 2013, Opening Plenary Address, First International Conference on Science and Spirituality, Puebla, Mexico.

Symposium/ Workshop whole day (with Edward R. Close PhD). First International Conference on Science and Spirituality, Puebla, Mexico.

Addresses to the Royal Society of South Africa, South Africa (*e. g.* 2006, 2004, 2002)

Tardive Dyskinesia management, American Psychiatric Association, Washington, DC, U. S. A. 1992

Serotonin 1A neuropharmacology in the aged. Rome, Italy, August 1991

Carbamazepine in dyscontrol and nonresponsive psychosis. Basle, Switzerland, January 1989 (by special invitation of ten speakers from around the world).

Carbamazepine in behavioral states. Jerusalem, Israel, April 1989

Clinical psychiatry, psychopharmacology and anomalous experience. London, England. October, 1989.

Psychosocial aspects of epilepsy. Epilepsy Institute, Conference, New York, United States, June 1989 (by invitation: other epileptologists Drs. Dreifuss, Penry, Engel, Leppik) (billed as one of the "*finest half-day conferences of superepileptologists ever held*".)

Anticonvulsant Drugs and Psychosis. Special Plenary Pre-conference, Symposium to the American Psychiatric Association, on Biological Aspects of Psychoses and Mood. Montreal, Canada, May 1988

Five presentations to the Epilepsy International Congress. Hamburg, Germany, 1985

The Sheldrake hypothesis: perspectives on a controversy. Invited lecture to the Royal Society of South Africa, Johannesburg, South Africa 1985

Non-responsive psychosis: Neuropsychological rehabilitation by antikindling agents. SA Brain and Behavior Society. 1984

Lecture series, Déjà vu. University of the Air, South African Broadcasting Corporation. 1983

Neppé V, Close E. Nutshell on TDVP. IQNJ 8:3, 7-79 September 2016. V10.36

Temporal lobe epilepsy Déjà vu, Epilepsy International Congress, London, England 1982.
Carbamazepine double blind study in non-responsive psychosis. Kyoto, Japan, 1981.
Research contributions in anomalistic psychology. SPICA Conference, Medical School, Harare, Zimbabwe (Special Guest Speaker). 1981

*** Presentations: Listing Of Selected Institutions:**

Invited Address, Nutritional supplementation and biopsychosocial issues. Obesity Course. American Society for Bariatric Physicians, Seattle, WA, April 2010

Grand Rounds and lectures or CME presentations in the Departments of Psychiatry, Neurology, Medicine, Family Practice or Psychology

include the following institutions (*date indicates earliest if > 1 talk*):

*** United Kingdom:**

University of London (Maudsley Hospital & Institute of Psychiatry) London, England 1985

University of Charing Cross, London, UK 1985

*** United States and Canada** (far more schools than listed here).

Case Western Reserve 1991

Columbia University 1985

Cornell University 1982

Duke University 1997 and most recently June 2016.

Mayo Clinic 1991 Internal Medicine; Family Practice; 1999 Psychiatry

Maryland Psychiatric Research Institute, Baltimore, MD. 1983

NIMH 1983

St Louis University 1989

Stanford Medical School 1989

University of Minnesota 1991

University of Oregon 1991

University of Washington 1986

University of British Columbia 1986

Washington University, 1991

Yale University 1983

All the Chicago area Medical Schools (7)

All the New York metropolitan area Medical Schools (6)

All the Southern California area Medical Schools (7)

*** South Africa**

More than 150 presentations predominantly 1976 to 1985 and thereafter during several visits.

*** China**

Beijing University, 2006

University of Shanghai, 2006

*** Chairperson** of International Conferences on four continents

Chairperson, APA satellite symposium, Washington, DC 1992

Chairperson of Symposium at International Psychogeriatric Association Congress, Rome, Italy, 1991.

Chairperson of Symposium at World Congress of Biological Psychiatry, Jerusalem, Israel 1989.
Organizer and Chairperson "Carbamazepine Use in Neuropsychiatry", Seattle, WA, Oct. 1987
Chairperson, Symposium, World Congress of Biological Psychiatry, Philadelphia, 1985
Organizer and Chairperson of an International Congress in South Africa in 1980.

S. Appendices.

Appendix A: Comments on TDVP model of Dr Close and Dr Neppe. Critiques by qualified colleagues.

Appendix B: Comments By Other Prominent Scientists: One each has been chosen to represent specific disciplines.

Appendix C: Index of key tables referred to in the above documents.

These are broad and reference to the original sources may be useful.

Table 1 compares the different key philosophical models.

Table 2 tabulates broadly 24 major "theories of everything".

Table 3 tabulates mass energy equivalent scores and gimmel in atoms including the fermion components (electron plus quarks).

Table 3b: Cosmological "Dark" Data and proportionate gimmel analysis

Table 3c. Atomic ratios of dark matter correlated to gimmel in nucleons and dark energy

Table 4 TRUE unit and gimmel analysis of chosen elements (Life elements, Abundant elements, Specific examples).

Table 5 Scores of gimmel and TRUE for some examples of key elements.

- Table 5A: Typical Element example: Helium Atom .
- Table 5B: Hydrogen 2 (Deuterium)
- Table 5C: TRUE-Unit Analysis for Hydrogen 1 (Protium).
- Table 5D Oxygen.

Appendix D: Summary of the TDVP work for the intelligent layperson.

Appendix E: Videos, Audios and YouTubes^d

^d References is the texts above. 1. Neppe VM, Close ER: Explaining psi phenomena by applying TDVP principles: A preliminary analysis *IQNexus Journal* 7: 3; 7-129, 2015.

2. Close ER, Neppe VM: Atomic materialism, the periodic table and generalizing cosmologically. Part 3. *World Institute for Scientific Exploration (WISE) Journal* 4: 4; 13-17, 2015.

3. 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.

4. 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.

5. Neppe VM, Close ER: *Reality begins with consciousness: a paradigm shift that works (Second Edition)* 1 Edition. Seattle: Brainvoyage.com, 2012.

6. Neppe VM, Close ER: *Reality begins with consciousness: a paradigm shift that works (First Edition)* 1 Edition. Seattle: Brainvoyage.com, 2012.

7. Close ER, Neppe VM: The thirteenth conundrum: introducing an important new concept, TRUE units—Triadic Rotational Units of Equivalence. *IQNexus Journal* 7: 2; 60-71, 2015.

8. Wolfram research: Abundance in the Universe of the elements: Mathematica's element data function pp periodictable.com/Properties/A/UniverseAbundance.html 2015.

Appendix A: Comments on TDVP model of Dr Close and Dr Neppe. Critiques by qualified colleagues:

There are few individuals worldwide who can in honesty express expert opinions on TDVP. At this stage, we have encountered three possibly **on the Neppe-Close work as follows:**

Dr David Stewart, PhD, DNM. Physicist, Mathematician, Earth Scientist, and Doctor of Natural Medicine (DNM); Author of over 300 published articles and seventeen books, who has examined the Close-Neppe work in detail including the mathematics:

"TDVP is of enormous paradigmatic importance because it reflects a new and all-encompassing perspective on reality. TDVP is different from any other "theory of everything" (TOE) because it is mathematically demonstrable, and impacts not only physics and chemistry, but also biology, psychology, metaphysics, parapsychology, and the consciousness sciences. Other TOEs really don't include "Everything," as Neppe and Close have done with TDVP. Without including consciousness, and its ramifications, any paradigm claiming to be a TOE, really isn't. So far as I know, Close and Neppe are the first to develop a theory of the universe of all creation that includes consciousness in a form that can be expressed mathematically.

In their book, Reality Begins With Consciousness, I wrote the following:

'This is the book of books. Close and Neppe have succeeded in articulating a unified theory that explains everything known through human experience and observation, including, not only the data obtained by the five senses, but also the data that comes through mind and feeling. Former scientific thought has considered the material universe to be the total universe with consciousness to be the result of matter. Neppe and Close have shown the reverse. Matter is inseparably linked with consciousness. They have succeeded in the ultra-complex task of including everything we know through the material laws of Classical Physics, Quantum Physics, and Relativity, with the non-material observations gained through psychology, parapsychology, and spiritual vision, into a unified metaparadigm with consciousness as the foundation of all creation, including the origin of creation, itself.' The application of TDVP, TRUE units, and Gimmel, provide a mathematical basis for derivation of the entire Periodic Table. For the first time, there is a scientific explanation of why there are the exact number of natural elements there are and no more; an explanation of the Pauli Exclusion Principle; and why the configurations and dimensions of the electron shells, defining each element, are as they are. It also explains why certain elements are essential for life, while others are not. It explains why Hydrogen and Oxygen combine to make water, an abundant and ubiquitous compound, with unique properties that forms the foundational substance that supports virtually all forms of terrestrial life.

Their work has found solutions and explanations for the many unanswered "Why's and How's" of the universe--questions that have baffled the even most precocious of minds, and

even avoided, by many of the most brilliant minds of history.

In summary, I rank Dr. Edward R. Close and Dr. Vernon M. Neppe as peers of the major authors of modern physics and mathematics. I equate them with greats, such as Planck, Einstein, Heisenberg, Schrödinger, Bohr, Dirac, Born, Pauli, Bell, De Broglie, their predecessors such as Newton, Maxwell, Leibnitz, Kelvin, and many others. Their work, which is built upon the works of these extraordinarily brilliant and innovating pioneers, has clarified, and extended the science and mathematics that these geniuses originated over a century ago.

The work of Close and Neppe has laid a foundation for all future science to develop. The world of scientific understanding, in all fields, has been permanently changed, and set in a new direction, by the work of Close and Neppe. The future of all mankind is forever brighter because of what they have done. And they aren't finished, yet. ... I foresee the day when they will both be awarded other honors, such as a Nobel Prize in Physics and (equivalent in) Mathematics."

Dr Adrian Klein, MDD, PhD, PhD, Israel. Dimensional Biopsychophysicist and Consciousness Researcher, who has studied almost every publication on these topics by Drs Neppe and Close, developed his own model and interacted in detail with these scientists. Dr. Adrian Klein is an Expert on Theories of Everything, pioneer of the Subquantal Integration Approach; he was the major analyst of TDVP and "Reality Begins With Consciousness".

*I've just completed the perusal of your impressive work. I feel very excited to have sensed myself, the enthusiasm of discovering so many overlapping fields in our views!
...A work that will change mankind's future.
...For the first time in mankind's history, its real nature is scientifically disclosed at the highest charismatic academic level!
...Reading your masterpiece, be aware of my deepest reverence for your monumental work!
...A seismic shift in understanding the understanding process itself!
...The beginning of the ultimate disclosure about the nature of an all-encompassing reality.
...A monumental work forcing obsolete preconceptions to crumble.
...The 21st Century's revolutionary paradigm shift.*

And later:

*Understanding their ground-shaking contribution for the whole History of Science, their courage to assess new guidelines for future investigation programs of Nature and Reality in an unbiased frame of mind, and their enthusiastic readiness to disclose such unprecedented conceptual trends for the benefit of Science and Mankind as a whole. (They) persuasively reverse misleading ontological tendencies originating in disqualified metaphysical backgrounds by asserting an upside-down epistemological approach for the primary determinism that Information structures have upon their physical counterparts.
The new horizons opened with (their) ... is so amazing, that they hardly may find peers in this
Neppe V, Close E. Nutshell on TDVP. IQNJ 8:3, 7-79 September 2016. V10.36*

cutting edge, post-materialistic, scientific domain.

The only conceivable motivating force behind their courage of expression in the mostly unfriendly academic tenure-controlled environment they dare to confront, is in their exclusive commitment to the Truth and Reality. The observing of these - and only these—criteria for mapping their breakthrough orientation—always was and is their conceptual imperative. However, this contradicts the widely accepted norms and obsolete rules imposed by mainstream canonical materialistic thinking ...has the unique moral strength to confront destabilizing adversities ceaselessly ready to fight from every corner their well-documented but novel convictions, at any price.

Demolishing by these proofs the last crutches of materialistic tenets, they bring a massive contribution to the advancement of Real Science, supplying a most efficient tool for the modeling and setup of the New Paradigm, the one of the future.

They don't fear to bring infinity (under its various aspects and degrees of applicability) into the range and equations of human logic, thus making possible an unprecedented expansion of this logic itself. This is—in my opinion—their paramount constructive contribution to mankind's ability to grasp its own nature and world-line, in a hitherto undreamed-of complexity, made transparent by their not less than genial paradigmatic shift.

Each detail has been carefully polished along successive editorial variants, each sound in this magnificent orchestration of expanded awareness and understanding has been meticulously and patiently tuned into the overall music of Nature, where they also originate.

Seeing the unprecedented brilliance and potentially limitless scientific and philosophical outreach of this work, I am unable to conceive of any other contemporary scholars displaying (such) a tremendous contribution to the interdisciplinary integration of Psi-related phenomena comparable to this one. This is so as it yields a fresh and accurate understanding of various investigation fields of Nature, and opening such a groundbreaking development perspectives for Sciences (emphatically plural!).

and Dr Alan Huguenot DSc, Physicist and Engineer:

“Your thoroughness in testing and proving your contribution is singularly remarkable, and extremely rare in today’s scientific community. Many scientists wait for others to prove or disprove their hypothesis, but you have diligently examined each possible obstacle yourself, this is admirable and indicative of your careful intellects. Further, your comparison of TDVP against all the other “TOE’s” is also laudable.

I will re-iterate (in paraphrase) your own discovery, “TDVP is the only paradigm that is universally applicable, can demonstrate both the physical reality and survival, works in practice, and is complete within itself, while at the same time not relying on, as yet undiscovered factors”. Currently, TDVP provides the only cohesive scientific framework within which any meaningful research can be undertaken. Most of the other TOE’s entirely lack useable mathematical tools, and with the exception of Laszlo, Bohm and Wilbur, in my opinion the other TOE’s philosophically amount to no more than speculations. Finally, TDVP not only “allows” consciousness survival it ‘requires’ it.

Frankly, the two of you should be nominated for a Nobel Prize merely for your achievement in
Neppe V, Close E. Nutshell on TDVP. IQNJ 8:3, 7-79 September 2016. V10.36

mathematically deriving the Cabibbo Angle (which no one else has yet done) and this is not to mention the remainder of the monumental edifice you have constructed from whole cloth in the TDVP. When taken altogether, the entire work is worthy of several separate Nobel Prizes.”

And finally a collective contribution: SCERS:

The Seattle Consciousness Education and Research Society (SCERS), is a group that has been meeting periodically since 2001. There are eight signatories below. Dr Neppe is chairperson of SCERS and sometimes with Dr Close, the eight of us participate in their mentoring and interchange with our own ideas. We have also all had the privilege to read at least a few of their papers. Some of us have read many of them, and in one instance, all the recent papers. The contributions of Drs. Close and Neppe are so versatile, and impact so many disciplines that none of us can be expert in all their areas.

Joyce Hawkes PhD Biophysicist and Fellow, American Association for the Advancement of Sciences; Dale Sobotka MD, Psychiatrist; Jason Schneier MD, Gastroenterologist; Bill Pendergrass, PhD Biochemist academic; Suzan Wilson, Jungian Psychoanalyst; Peter Davenport, Director National UFO Reporting Center; Charna Klein, Anthropologist; Margaret Bartley, Computer Information Systems Expert.

“There are some who are describing Neppe and Close as the new Einsteins. Yet, ironically, many don’t read what they’ve done. They are twenty or thirty years ahead of their time, and many don’t even realize the significance of what they’re doing. Certainly, the parapsychological community has been apathetic, possibly because they don’t understand what Neppe and Close are doing. Yet, their work revolutionizes parapsychology because it allows an explanation for psi phenomena¹ and refutes materialism based on the atomic structure² yet still allows a Unified Monism³.

Even by early 2014, the Neppe-Close work was classified as one of two most important contributions to mathematical physics of 2013⁴. And the appendix, with some quotes from scientists about the First and Second Editions of Reality Begins with Consciousness^{55; 6}, show the esteem scientists from several disciplines hold them in. And yet, following this, we have seen the Neppe and Close golden year period from late 2014 through to the end of 2015.

These achievements are a coherent whole, with each amplifying the other. The unitary thread in and of itself amplifies and synergizes with every other component. Here, the whole is even more than the part, because it makes perfect sense.

The Neppe-Close linkage of gluons with gimmel is an example which amplifies and, indeed, enhances and modifies the work of a famous physics Nobel Laureate. And their remarkable demonstration of the error in Atomic Materialism dispels a fundamental and known truth, but very convincingly because it applies replicable mathematical proof. Their proof that finite reality contains 9 rotating dimensions, and not just 3S-It is huge, because it changes our perspective from the experience of reality, to the existence of reality. Moreover, the actuality of gimmel, and its links to the life elements and, because we are limited

in cosmology , the tentative links of gimmel/ TRUE to dark matter-dark energy/ cosmological existence, impact on the sheer fundamentals of science.

And the first model to link very adequately, psi and relative non-locality with our physical reality, is of itself dramatic. This is besides the elegant awareness of applying a quantized reality.

The Neppe-Close contribution to philosophy is also enormous: Unified Monism as the first philosophical model derived from science, and applicable to both Consciousness and physicality and yet not requiring any Cartesian or modified dualism,

Moreover, we logically propose that the concept of LFAF will become a far more reasonable way to approach science than rigid scientific falsifiability. Even what were conjectures are now strongly based because there is mathematical support behind every single model above.

The Neppe and Close contribution has been their remarkable ability to be able to recognize that what was sometimes regarded as correct, is incorrect or needs modification. They are unafraid to pioneer new areas. This is repetitively demonstrated by their history, and this occurred even before they came together. They are simply great thinkers who have been prepared to lead, even when the more usual academic scientists are threatened by new paradigmatic thought.

With great respect, any one of these areas (31 listed), let alone the combination would be a very substantial reason for Drs Neppe and Close to be recipients of major prizes:

Drs Neppe and Close deserve both, and jointly as they are equal co-researchers. And so does the world deserve to recognize them because this may accelerate their further progress. Thus far, they have not had a penny of funding. But they regard this work as the song they have come to sing. The rapidity of their contributions is unbelievable, and (an) accolade may greatly speed their contributions to science.”

The following are comments from RBC 5 and from several previous versions, in most instances. So these preceded the major works from mid-2014 to the present.

Appendix B; Comments By Other Prominent Scientists:

One scientist has been chosen to represent each specific discipline.

Multidisciplinary Sciences

Most physical TOEs (theories of everything) fail because they don't explain where the TOE comes from in the first place -- a creative act of consciousness. Most psychological TOEs fail because they don't appreciate the very real physical context in which the psyche struggles to explain itself. Reality Begins with Consciousness (RBC) avoids these mistakes by taking a TOE's promise of "everything" seriously. This puts RBC in a radical multidisciplinary class by itself, and as a result, understanding it is nontrivial. This should not be surprising, for unadorned Reality as-it-is is vast and hyper-complex, and any TOE that hopes to model that Reality must be equally vast and complex. But for readers who are up to the challenge and are able to stretch their minds in many directions, tackling RBC is well worth it.

Dean Radin, PhD, Senior Scientist, Institute of Noetic Sciences, Petaluma CA. Extensively published author, cognitive psychologist, electrical engineer, (possibly the world's leading)

parapsychological researcher, consciousness researcher.

Psychological Sciences

Vernon M. Neppe and Edward R. Close have written what is destined to become a classic in the literature on shifting paradigms and worldviews. Drawing from a dozen different disciplines, they have adroitly pointed out the limitations of the Western world's currently accepted model of reality, have spelled out the unfortunate consequences of this model's hegemony, have proposed a paradigm that is not only multidimensional but metadimensional, and have supported it with logic, mathematics, research data, and common sense. The implications that this book has for the betterment of humanity makes for worthwhile, illuminating and enlightening reading which is practical and transformative.

Stanley Krippner, PhD, San Francisco, CA, USA. Pioneer, Humanistic Psychology and Consciousness; Saybrook University; extensively published Author and Scientist

Neurosciences

*What an astonishing and prodigious accomplishment! The way the authors communicate their profound insights both from our usual "bottom-up" experience as well as from the "top-down" higher realities facilitates engaging readers in this unique and groundbreaking scientific model: We're able to swim longer in the vast subtle and not-so-subtle cosmic pond—and the references provide handholds to keep us afloat. I kept flashing on a museum installation that would allow people to have a "walking around in" experience of climbing through dimensional rifts (in music: *ostinati*) and connect all around with vortical interactions. I guess this comes from years of my interpreting to people the leaps in transformation I see continually emerging in Neurofeedback work: The Neppe-Close paradigm now provides for a much more coherent way to understand reality. Once introduced, the actualities of these unifying concepts begin to live. It is quite stunning to observe people speaking from an "already having changed" perspective...a thrilling journey!*

Alan Bachers, PhD, Northampton, MA. Neuroscientist; Director, Neurofeedback Foundation

Life Sciences

Scientific revolutions require both empirical evidence and related coherent explanatory frameworks. The encyclopedic book "Reality Begins with Consciousness" leads in providing the sought after broader scientific unification linking the neurosciences, consciousness, biological, psychological and the physical sciences with math-based logical philosophy and spirituality. Drs Neppe and Close provide a missing broad exploratory paradigm for new scientific ideas that can continue to be researched for many years to come. Whether or not this multidisciplinary model is ultimately viable, the cogent supportive data should encourage scientists to explore seriously the underlying ideas; the models presented go further than other volumes.

John Poynton, PhD, London, UK. Consciousness Researcher; Biologist; Author; Past President, SPR.

Philosophy of Science

Prof. Vernon Neppe and Dr. Edward Close have prepared a much-needed volume that
Neppe V, Close E. Nutshell on TDVP. IQNJ 8:3, 7-79 September 2016. V10.36

aims to integrate our scientific knowledge into a comprehensive natural-law paradigm. Their work leaves no stone unturned in the quest to re-configure our understanding of science, including those more remote or fringe areas of science such as parapsychology that only a few of our highly respected and honored scientists are brave enough to endorse. This new book by Neppe and Close is a paradigm shift that hails in, if not, beckons for, a kind of scientific overhaul and shift in thinking that Thomas Kuhn spoke of in his major work "The Structure of Scientific Revolutions.

Lance Storm PhD, Adelaide, Australia. Consciousness researcher, Author, Journal Editor, Psychologist, Parapsychologist and Philosopher of Science

Philosophy

This authoritative work in consciousness studies will shape philosophical discourse about mentality and mind. It is a serious and lucid exploration of a most complex topic, suitable for philosophers and cognitive scientists who seek explanatory models that allow one to reach beyond methodological boundaries while at the same time adhering to scholarly rigor.

Recognizing consciousness without boundaries and as formative action leads to unexpected conclusions outside any normative space, while at the same time providing a profound value to the future of humankind. Neppe and Close have masterfully demonstrated that hope is inside and outside Pandora's box.

Helmut Wautischer, PhD, San Rafael, USA. Philosopher, Consciousness Researcher and Author. Sonoma State University.

Medical Sciences and Mathematical Physics

... your book is impressive. It seems astonishing that you could combine deep scientific notions with mysticism. I never knew that such work was possible.

Dr. Frank Luger, International (Private) Research Professor, Retired Physician, Mathematical Physicist, Poet, Author, Psychologist, and Chess Grandmaster.

Appendix C: Index Of Key Tables Referred To Above.

Table 1 A Comparison of Five Key Modern Philosophical Models

Pertinent To Unified Monism (Neppe and Close, ©)

Philosophy	1 Panpsychism	2 Realistic Materialism	3 Dualism	4 Pantheism	5 Unified Monism
Origin	Thales, Plato, William James	Galen Strawson	Rene Descartes	Benedict (Baruch) Spinoza	Vernon Neppe and Edward Close
Fundamental	Mental aspect in all matter; unified experience	Matter variant explains meaning	Mind-matter separate	God is in everything; God is unity of all substance.	Continuous infinite contains discrete finite; Triad: Space, Time and Consciousness tethered
Principles	Consciousness = universal, primordial feature of everything. Self= minds in a world of minds.	Realistic physicalism entails panpsychism; our nature is capable of mental activity; not ultimately responsible for oneself so free will is impossible.	Allows for “consciousness and matter but they are separate but interact.	All-encompassing existence /reality/ universe identical with immanent /manifests Divinity	Triadic: “Consciousness” content always exists in all but so does matter and energy (MEC ^c); extent of space, time, consciousness (STC ^c) all tethered.
Incorporating other models	No physicalistic models or dualism; so excludes 2, 3, 4 and 5	No mind models or dualisms; so excludes 1, 3, 4 and 5	No monistic models so excludes 1, 2, 4 and 5	No non-theistic models so excludes 1, 2, 3 and 5	Incorporates all with modifications: #1 In infinite reality= panpsychism; #2 in 3S-1t realistic materialism but that is in 9D so free will relative; #3 finite embedded in infinite— interacts but not dualistically; #4 God can impact but so can all else.
Basic origin	Idealism monism	Materialism monism	Separate mind-body dualism	Realistic Theistic monism	STC unified monism
Key problem	Virtual non-physical reality	Survival after death; mind without matter	Mechanism of interaction	Beyond one’s existence	None: Explains STC ^c , MEC ^c ; allows impact (C ⁱ + M ⁱ E ⁱⁿ) *
Awareness	Fundamental is mind	Fundamental potential to matter	Fundamental is both mind and matter	One being	Yes independence; fundamental is all of STC tethering, infinite, multidimensionality
Derivation and base scientific	No	No	No	No	Yes; Empiricism of TDVP necessary; result secondary is the UM philosophy
Mathematical derivation	No	No	No	No	PFDCIII ^ ; fundamental Mathematicologic; Yes
Charge & spin	Not direct	Fundamental to matter	No.	No.	Yes
Meaning	Yes	No	Yes	Yes	Yes
Life	Yes idealism	No	Compatible	Yes idealism	Yes
Micro to macro	Yes	No	unlikely	Yes	Yes
Inanimate aware	Yes idealism	No	? variants	? variants	Yes
Space-time independence	No	Yes	Yes	No	Yes but tethered together and with “broader” consciousness
Virtual reality	Likely, yes	No	No	Possibly	No
Fundamental Problems	Do we really exist?	Survival and ? sentient beings unexplained.	Chalmers unsolved;	Extreme: Divinity	None

Philosophy	1 Panpsychism	2 Realistic Materialism	3 Dualism	4 Pantheism	5 Unified Monism
			interaction	variant alone	
Physical exists	Yes and No.	yes	Yes	yes	Yes
Physical life	Variable models	Yes, key	yes	Not really	Yes
Psi	Yes	Not independent	Yes	Yes	Yes
Precognition	Not relevant	No	No?	No	Yes
OBEs; NDEs	compatible	? compatible	Logical	compatible	Logical natural consequence
Survival post mortem;	Yes	Unexplained, no	Compatible	One being= self	Logical and a natural consequence
Free will	Yes	Denied	Compatible	One being	Yes, but within constraints
Divinity	Compatible	Yes	Compatible	Required: One being	Compatible and very likely
Reincarnation	Variants yes; not pertinent	No	Compatible; unnecessary	No	Compatible but not necessary
Subjectivity	Yes	No	Yes	Yes	Yes
Objectivity	No	Yes	Separated	Yes, potential	Yes, together
Consciousness	Yes	No	yes	yes	Yes
Levels of consciousness	No	No	Possibly	No	Yes, fundamental
INDUCTS*	INDUCTS	INDUCTS	INDUCTS	INDUCTS	INDUCTS all *
FORMAL**	FORMAL	FORMAL	FORMAL	FORMAL	FORMAL **
Relative to	No	No	No	No	Yes: allows great versatility
Range	Same	Maybe e.g. OBE	Same	Same	Higher levels different (also so in TM); relative; vortical indivension
Fits into it	Non-reductive physicalism	Non-reductive emergent physicalism; Spatiotemporal Emergentism;	Non-physicalism	Monistic Divinity Theology	Divinity plus others impact tethering; could sometimes contain pantheism; Chassidic Theism part of impact; Transcendent theism first cause primary;
Variants	Berkeleyian idealism; phenomenism; mental monism; Vedanta Eastern	Peter Strawson: Realistic Monism of Non-reductive physicalism; epiphenomenalism; functional reductionism, Identity reductionism;	Substance Dualism (Descartes; Property Dualism (mind emerges); Promissory dualism	Pantheism; Theological monism; Chassidic theism; Transcendent Theism; Spinoza creator results in all infinite dimensions	Transcendental materialism (Zeno, Chryssipus, Betty) (discrete stuff not continuous infinite); Kabbalah (triadic STC untethered); Vortex N-dimensionalism/ pluralism (earlier Neppe); Transcendental Physics (earlier Close)
Different from	Neutral monism; Promissory materialism	vs physicalistic monistic reductionist materialism; Panpsychism variant;	Monism	Dualism; reductionist materialism	Classical monism or dualism and all variants; none

- ** The Close –Neppe Calculus of Existential Distinctions differentiates extent of Space, Time, Extent of Consciousness (C^c) substrates; content (Mass, Energy, Content of Consciousness (C^c) matrix; multidirectional influence: Mass influence (M¹), Energy influence (E¹), Consciousness influence (C¹) allowing limited free will. INDUCTS and FORMAL are mnemonics outlying the Neppe-Close TDVP paradigm and Unified Monism, its philosophical consequence. PFDCIII is not a mnemonic but reflects the various mathematical areas.
- * INDUCTS: Infinity, Natural Law (demonstrable), Dimensions (of extent), Unification, Consciousness, Tethering, Subjective-Objective components.
- **FORMAL Feasibility-without falsification, order - ordropy, relative reality, mathematics, all-encompassing array, life
- ^ PFDCIII: Mathematical Bases: Pythagoras Theorem modified (Close), Fermat's Last Theorem, Dimensional Extrapolation (Close), Calculus of Distinctions (Close), Modification of Incompleteness of Gödel (Neppe), Impact Distinctions (Neppe), Infinite Continuous—Discrete Metafinite (Neppe, Close)

**Table 2: Theories of Everything (Paradigms for Reality)
Compared When Applying the 39 Broader Criteria.**

Name of model	Author	General	Specific	Notable	First 27	Total	Year
		16	11	12	27	39	
<i>Triadic Dimensional Distinction Vortical Paradigm (TDVP)</i>	<i>Vernon M Neppe / Edward R. Close</i>	16	11	12	27	39	2011
<i>Vortex N-Dimensional Paradigm</i>	<i>Vernon M Neppe</i>	15	7	5	22	27	1989, rev1996
<i>Transcendental Physics</i>	<i>Edward R. Close</i>	13	9	1	22	23	1985
Quantum Field theory subquantum integration approach	Adrian Klein /Neil Boyd	13	6	0	19	19	2010
Kabbalic mystical model	Ancient reflecting Judaic tradition	12	5	2	17	19	ancient
Implicate-Explicate Order	David Bohm	11	6	2	17	19	1980
The Akashic Field	Ervin Laszlo	10	5	3	15	18	2004
TES; Theory of Enformed Systems	Don Watson	11	5	1	16	17	1998
“My Big TOE” (MBT)	Thomas Campbell	12	5	0	17	17	2007
The theory of formative causation. (FC)	Rupert Sheldrake	11	5	0	16	16	1981
Transcendental Field Theory	Bernard Carr	10	3	3	13	16	2008
Vedic mystical model	Vedic	11	4	0	15	15	ancient
Biocentrism	Robert Lanza	9	5	0	14	14	2004
(Consciousness) Material Dualism. Modified	John Smythies	11	1	2	12	14	1956 to later
Standard Materialistic Reductionist Scientific Model	Standard various	7	5	1	12	13	-2016
CTMU Cognitive theoretic model of the universe.	Chris Langan	7	5	0	12	12	1998
Quantum Activism	Amit Goswami	10	0	1	10	11	11
Kosmos	Ken Wilber	7	4	0	11	11	1995
Conscious Realism	Don Hoffmann	6	3	0	9	9	2006-8.
Consciousness and Hyperspace	Saul-Paul Sirag	7	2	0	9	9	1993
Typology of Aether-Motion-Pattern	Alfred Evert	8	0	0	8	8	2010
Many World interpretation	Stephen Hawking	7	1	0	7	8	1996-
String Theory Including Superstrings and MTheory	Numerous Green and Schwarz, M theory many others	6	1	0	7	7	1984-1988.
Nonoverlapping Magisteria (NOMA)	Steven Jay Gould	3	0	0	3	3	2001
Total # TOEs included category		9-24	4-13	1-4	1+2	=	
# TOEs included in category		24	21	10			
# criteria per category		16	11	12	27	39	

Table 2 criteria: Legend

The three groups of criteria, 16 General items, 11 Specific items, and 12 Notable / Special items listed in Table 2 are now clarified:

General criteria (16 items)

These are scored as a general subscore (G) reflecting the most usual criteria for TOEs.

These may involve specific hypotheses but common across several TOEs (≥ 9 instances) so included in the broader TOE scoring. One exception was =8, psychological but was found, post hoc. (Δ = in 10 or more categories) “?” reflects insufficient classification to ensure it fulfills the required criteria, - is when it does not and \surd when it does.

e = Regarded as a theory of everything (generally by the author or by others)

m = Mathematics is significantly a core part of the model, not just en passant.

c = Content, e.g., vortices (*V*), subquantal (*Q*), non-quantum receptor (*NQ*), morphogenetic fields/ formative causation (*M*), transcendental fields (*T*), phenomenal spaces (*P*), Akashic field (*A*) or (*Af*)

I = Infinity (this involves either continuous or countable infinity as a principal concept)

p = Process to communicate: *ID* = Indivension or equivalent (cross dimensions, biopsychofamiliosociocultural), *FC* Formative causation, phenomenal consciousness (*PC*).

M = Consciousness/ Mind/ Information

Q = Quantum level

H = Human level

S = Structure, e.g., Vortices, fields etc.

π = thinking; philosophical translation defined to mind-body model

R = Meaningful reality of some kind

h = history of core mystical concept over millennia

B = Life Sciences, biology (principal concept)

D = Dimensions beyond 3S-1T

+ = 3 elements: Space / Time (or Mass-energy)/ Consciousness (or Information)

P = Psychology and social sciences (principal concept)

Specific criteria (reflects 11 items): *Special qualities common to several TOEs including TDVP* (and so excluded from the TOE broader scoring; second subscore (S2).

The following additional 11 criteria are *special* to some TOEs and were developed, in part, during referee feedback. This has been called “Specific Hypotheses” as they’re specific to many models. Nevertheless, they so pervade several TOEs, that they’re included in the broader TOE scoring. (6 items have ≥ 10 instances; and all items show at least 4 TOEs with that concept). Some could have been defined under general because ≥ 9 TOEs showed the criterion, but this differentiation was post hoc. The “Specific” header still reflects fundamental and broad criteria because so many theories still list this. (Δ = in 10 or more categories).

O = Origin at source /beginning/ Origin Event/ around the big bang or before or infinite.

¶ = Evolution as an important part.

© = Paradigm — more than a Theory of Everything, if accepted, this causes logical change in the models in that that discipline.

T = multidimensional time

x = ordropy

q = uniqueness

L = Linguistic (the development of necessary new terms as a core part of the model)

§ = Theorems/proofs (mathematical; demonstrable)

n new Generation of 100s of ideas/ postulates demonstrated

N = explanation of consciousness mechanisms within neurophysiology (principal concept)

d = distinctions (minimum: perceptual and actual or conceptual; not necessarily CoD)

Notable (or “Special”) criteria based on feedback (= 12 items)

These criteria reflect pertinent elements but which were not initially shared by more than three theories (with re-evaluation one criterion—infinity—was shared by a fourth. With the gradual development of TDVP, further coherent, consistent, feasible, and logical elements required comparison.

a = across dimensions (being able to communicate across multiple dimensions); this includes indivension, which is a specific case of communication and interfacing points or vortices across dimensions

f = fluctuating dimensions (states of consciousness; variation across individual-units)

F = feasibility measure

∞ = Infinity-finite interaction

£ = Consciousness qualities (specifically taken into account in model as dimensions)

μ = Metaparadigm: overriding paradigm impacting the major disciplines of science: consciousness, life, physical, psychological sciences

3 == STC tethering (a fundamental and inseparable component of space-time-C-substrate being unified, and yet being able to extend separately in their own dimensional expression).

ϕ = Continuous- discrete as fundamental part of model

† triadic patterning (specific e.g. tethering)

≠ = Interval and ordinal metric data (allowing CoD of consciousness)

C dimensions of consciousness

j dimensional jumps

These criteria are all demonstrable in Table 2. However, they reflect only the qualitative differences. Quantitatively, the difference may be far greater, for example, the fifty theorems and the several hundreds of ideas generated by the TDVP model. Effectively, this means that the difference is far vaster than just the presence or absence criterion for a particular criterion: Quantitative measures reveal even more profound differences.

Note that only the Neppe-Close, and the original Neppe and Close models scored >20/39. There were three TOE models that scored 19/39: Kabbalah (which reflects much of the philosophical, non-scientific aspects of TDVP and which also is scored with several ‘?’s because it is so esoteric); the Klein-Boyd Subquantal model, which has some aspects similar to gimmel at the fermion level; and the Bohm Implicate-Explicate model, which again, has some vague similarities to TDVP.

Table 3a: Fermions of Neptons converted to gimmel, TRUE unit and MREV scores^c

Particle	Charge	Fermion	Spin	Raw in MeV/c ² [^]	Normalized MeV/c ²	Fermion Massergy	λ Gimmel	λ Total	Total TRUE	Combined TRUE * [^]	MREV ^{^^} arr↓
Electrons (e ⁻)	-3	e	1/2	0.511	1	E=1	105	105	e=106	e=106	1,191,016= =106 ³
Cubed result											
Protons (P ⁺)	+3		1/2	740-1140	938*	P=17		P=7		P=24	13,824=24 ³
Up quark (uq1)	2/3	uq1 p	1/2	1.87-2.15	4		2	1	6		
Uq2	2/3	uq2 p	1/2		4		4		8		
Down quark (dq)	-1/3	dq1 p	1/2	4.63-4.95	9		1		10		↓
Neutrons (N ⁰)	0				940*	N=22		N=16		N=38	54,872=38 ³
Uq3	+2/3	uq3 n	3/2		4		5		9		
Dq2	-1/3	dq2 n	3/2		9		3		12		
Dq3	-1/3	dq3 n	3/2		9		8		17		↓
Totals →	0					40		128	→	168 horizontal	=108 vertical
Cubed totals										(4741632) ↓	(= 1259712)
Cube										=168 ³	=108 ³
Factors										=(2 ³ *3*7) ³	=(2 ² *3 ³) ³

[^] MeV/c² = Massergy (referring to mass-energy equivalence) Volume/ square of the speed of light.

^{^^} TRUE = Triadic Rotational units of Equivalence; MREV = *Minimum Relative Equivalence Volume (MREV)*.

^{***} figures for TRUE relate to fermions and gimmel and resulting neptons not to the massergy equivalents of the protons and neutrons which also contain other subatomic particles; these figures vary but give a perspective of order of magnitude; the 938 (Protons) and 940 (Neutrons) (Fowler, 2016) figures do not deal with TRUE units but is the total massergy per volume in those particles; ditto for electrons except those are simply fermions. In another context proton represents 1836 and neutron 1839 (Neppe 2015) so these figures might just reflect different equivalents and although roughly double are not contradictory.^g

Table 3b. Cosmological “Dark” Data and Proportionate Gimmel analysis

- Research Hypothesis:** < 2%. However, the results confirm hypothesis: actually <0.001 difference. (p=0.0008)
- Volumetric (Dark Matter [26.8%]+ Dark Energy [68.3%])** ratio to cosmology **95.1% cubed = 86.01%** (Planck probe 2014 data).
- Gimmel to TRUE ratio** (already volumetric) of Abundant Elements Σ (volumetric) [Hydrogen 89.3% gimmel/TRUE * 0.75.6 abundance=67.5%] + [Helium+less abundant life elements with the same gimmel score (O, C, Ne) = 76.2% * 24.4=18.59%] =**86.09%**.
- Results:** Difference between Dark proportions to the ratios of cosmological gimmel =**0.08%**: Truly remarkable! Table 3C: *Extends to the atom*.
- Publication:** Neppe VM, Close ER: A data analysis preliminarily validating the new hypothesis that the ratio of dark matter and dark energy to gimmel and TRUE units (Triadic Rotational Units of Equivalence) is contained in the atom: Dark matter correlates with gimmel in the atomic nucleus and dark energy with gimmel in electrons. *IQNexus Journal* 7: 3; 81-97, 2016.^h

Table 3c. Atomic ratios of dark matter (DM) correlated to gimmel in nucleons and dark energy (DE)

- Research Hypothesis:** <(5%-10%) given the Planck data proportions variation of DE and DM.
- Volumetric (Dark Matter [26.8%³] = 19.25%) / (Dark Energy [68.3%³] = 31.86%).**
 - Consequently this ‘dark matter/ dark energy ratio =**60.42%**
- Gimmel to TRUE ratio** (already volumetric) of (volumetric proportions) of Abundant Elements (Σ [Hydrogen abundance=70.57%] + [Helium+less abundant life elements = 29.43%]) in (nucleons [protons, neutrons, daled]=62.10%) / (electron gimmel =99.06%).
 - Consequently this ‘gimmel/TRUE’ ratio = **62.69%**.
- Results:** The difference between the proportions of (Dark Matter to Dark Energy) to the ratios of (nucleon gimmel[linked with quarks and daled] to electron gimmel) is remarkably close: 60.42% to 62.69%. The results not only confirm the research hypothesis but markedly so with only a **2.27%** difference, far closer than even the research hypothesis limit.
- Proposals:** Dark matter and dark energy may be ‘contained’ in the atom. This can be explained only by applying a multidimensional model, like 9 dimensional spin, not our experiential reality of length, breadth, height in a moment in time (‘3S-1t’).
- Publication:** This paper Neppe VM, Close ER: A data analysis preliminarily validates the new hypothesis that the dark matter and dark energy is contained in the atom: Dark matter correlates with gimmel in the atomic nucleus and dark energy with gimmel in electrons. *IQ Nexus Journal* 7: 3; 80-100, 2016.

^c Neptons refer to the composite term for the main components of the atom, namely neutrons, electrons and protons together. We developed this term in 2015⁷ because there appears to be no composite term for the components of the atom.

^f The horizontal total of 168 may have no great significance. But it’s mentioned for completeness. Post hoc, we have found that 108 turns out to be a mystical number with several remarkable coincidences.

^g Fowler M. Transforming Energy into Mass: Particle Creation. Retrieved August 2016.

http://galileo.phys.virginia.edu/classes/252/particle_creation.html. Also see:

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.

^h TRUE analyses focus on fermions’ scores, but there might be other mass-energy sources in nucleons as the detected mass of the proton is nearly 100 times more than the combined mass of two up-quarks and one down-quark. Examining the atom, this study shows that cosmological dark matter might correlate with nucleons, and dark energy with electrons when applying a 9D not 3S-1t model.

**Table 4: Some Elements And Compounds
Including Gap In TRUE Unit Analysis.**

Compound	γ Units	Total TRUE	Valence	Units γ %	TRUE Volume	Comments and Abundance rank # ⁱ
Hydrogen ^j	150	168	-2+1=-1	89.3%	(1x108) ³	Critical Element #1^k
Deuterium	128	168	-1	76%	108 ³	Isotope; rare
Tritium	144	206	-1	70%	(118.02) ³	Isotope; very rare
Helium	256	336	-2+2=0	76.2%	(2x108) ³	Inert Element #2
GAP COMPOUND					(3x108) ³	Gap^m
Helium Hydride He ₂ H	384	504	+1	76.2%	(3x108) ³	Super acid Not Natural
Lithium	384	526	+1	73.0%	(327.2...) ³	Asymmetric #44
Beryllium	528	710	-2+4=2	74.4%	(437.89...) ³	Asymmetric #44
(He) ₂ H. Gap	640	826	+3	76.2%	(5x108) ³	Gap In Nuclear Fusion
Boron	656	878	-2+5=3	74.7%	(545.64...) ³	Asymmetric #61
Carbon	768	1008	-2+6=4	76.2%	(6x108) ³	Organic element #4
Nitrogen	896	1176	-2+7=5	76.2%	(7x108) ³	Life element #7
Oxygen	1024	1344	-2+8=6	76.2%	(8x108) ³	Life element #3
Fluorine	1,168	1,550	+1	75.4%	(977.22) ³	Asymmetric #23
HO or OH; H ₂ N; or CH ₃ . Gap Radicals	1,174	1,512	-1 _n	77.6%	(9x108) ³	Building Blocks of Amino Acids. Gap
Neon	1280	1680	2-8+10=0	76.2%	(10x108) ³	Inert element #5
H ₂ O WATER	1,324	1,680	0	78.8%	(10x108) ³	Water
H ₄ N	1,496	1,848	+1	80.9%	(11x108) ³	Ammonium Ion. Gap
Sodium	1,424	1,886	+1	75.5%	(1,193.12) ³	Asymmetric #13
Magnesium	1536	2016	-10+12=2	76.2%	(12x108) ³	Life element #9
Aluminium	1,680	2,222	+3	75.6%	(1,409.06) ³	Asymmetric #12
C ₂ H 1Gap Compound)	1,686	2,184	+3	77.2%	(13x108) ³	Gap Component of Cysteine Amino Acid.
Silicon	1792	2352	-10+14=+4	76.2%	(14x108) ³	Postulated Life? #8
Phosphorus	1,936	2,558	+5	75.7%	(1625.008) ³	Asymmetric #16
Sulfur	2,048	2,688	+6	76.2%	(16x108) ³	Life element #10^o
Chlorine	2,192	2,894	+7	75.6%	(1840.97) ³	Asymmetric #23
Potassium	2448	3,230	+1	75.8%	(2056.944...) ³	Asymmetric #22
Calcium	2560	3360	+2	76.2%	(20x108) ³	Life element #12
Iron	3,392	4,520	+2	75.0%	(6096.39) ³	Asymmetric #6

ⁱ Abundance rank statistics vary markedly depending on whether the cosmos or earth are measured. Therefore two figures existed. However, there is now a third applying the Wolfram statistics and we've used that one. ⁸

^j Hydrogen 1 is unique at : 150/168 = 89.2% gimmel to TRUE ratio. Volumetrically 108³ = 1,259,712. 'Daled' vertically γ produces much more gimmel: 38 for daled instead of a neutron (0 MEUs).

^k C, N, O, Mg, Si, S, Ca, and Mg are life elements (turquoise). The two inert elements that have the same profile are He and Ne (green). Hydrogen is profound in gimmel. We also list a few other common, pertinent elements like P with its energy implications and Fe as a transporter in gray highlight Also listed are Li, Be, Bo as they're low in the periodic table and Na, Cl and Al for interest.

^l Gimmel: 105 for 1 electron (1 mass/energy unit MEU), 7 for 1 proton (17 MEUs), and neutrons are 16 for gimmel; 22 MEUs.

^m Gap implies that there are no elements with their characteristics. We have listed some *compounds* that do.

ⁿ Hydroxyl / hydroxide is OH is major component of water and building block of amino acids. H₂N is common in amino acids; CH₃ is a common organic compound radical.

^o Some gap compounds are still undiscovered at both the lower (e.g. 4) and the higher 108 cubed levels e.g. 15, 17, 18 and 19). Some radicals or compounds like water fill the gaps (yellow highlight).

Table 5 illustrations of The Elements and TRUE units.

All of these 4 are examples of stable abundant elements with gimmel: H2, He and O all have TRUE ratios of 76.19% (the life elements; and the inert noble gases); the ratio of H1 is 89.28%.

Table 5A: Typical Element example: Helium Atom

with $P^+ = 24$ and $N^0 = 38$ TRUE ratio of Helium, a noble gas element, is 76.2% (256/336).

Particle	Charge	Mass/Energy	λ	Total TRUE	MREV*
2e	- 6	2	210	212	9, 528,128
2P+	+ 6	34	14	48	110,592
2N ⁰	0	44	32	76	438,976
Totals	0	80	256	336	10,077, 696=2163

* MREV: Minimum rotational equivalent volume.

Table 5B: Hydrogen 2 (Deuterium; H2).

Valence = -2 + 1 = -1. H2 is equivalent to heavy hydrogen because it has a neutron.

H2 shows the ratio as helium 76.2%. All the life elements C, O, N, S, Mg, Ca have this same ratio (see Table 5D below). Si also has this property. Plus He and Ne (gaseous inert elements) but because their valence is zero, they are non-reactive in this context.

Particle	Charge	Mass/Energy	λ	Total TRUE	MREV
e	- 3	1	105	106	1,191,016
P+	+ 3	17	7	24	13,824
N ⁰	0	22	16	38	54,872
Totals	0	40	128	168	(108)³

Table 5C: TRUE-Unit Analysis for Hydrogen 1 (Protium).

Valence = -2 + 1 = -1. Hydrogen is the exception with no neutron and yet daled. Because of the "daled" units (gimmel?) replacing the absent Neutron: TRUE ratio of 89.28% in H1, far the highest figure for the H1, the most prevalent element in the cosmos.

Particle	Charge	Mass/Energy	λ	Total TRUE	MREV
e	- 3	1	105	106	1,191,016
P ⁺	+ 3	17	7	24	13,824
τ	0	0	38	38	54,872
Totals	0	18	150	168	1,259,712=108³

Table 5D: TRUE-Unit Analysis for Oxygen.

Valence = 10 - 8 = 2. Ratio of gimmel to TRUE is 76.19%.

Particle	Charge	Mass/Energy	λ	Total TRUE	MREV
8e	- 24	8	840	848	609,800,192
8P ⁺	+ 24	136	56	192	7,077,888
8N ⁰	0	176	128	304	28,094,464
Totals	0	320	1,024	1,344	644,972,544 =(8x108)³

Appendix D: Summary of the TDVP work for the intelligent layperson.

What does TDVP demonstrate? Here are some major examples:

1. A major demonstrable feature of TDVP is that we (Dr. Edward Close and Dr. Vernon Neppe) have *proven* mathematically that we exist in a 9-dimensional quantized finite spinning reality (9D spin). This has been replicated in several ways, most notably by the derivation of the Cabibbo mixing angle, itself replicated in a thought experiment.
2. This 9D contains our current overt physicalistic experiential reality in 3 dimensions of space in a moment (the present) in time (3S-1t). This means that the fundamental demonstrable findings of physics are not refuted, yet most of our dimensional existence remains hidden. 9D explains many other aspects of reality that 3S-1t alone cannot.
3. The next major finding is we have proven mathematically is that *the atom (a) cannot exist as we think it does*—it cannot *just* have the quantities of electrons (e), protons (p) and neutrons (n) for the elements listed in the Periodic Table of the Elements. Our finite reality is quantized and volumetric. Empirically, the correct allocations of the *quantized volumetric* calculations would be impossible without something else (a third substance): Effectively, the equation must be $e^3+p^3+n^3 \neq a^3$ but, when applying three different proofs, this cannot correspond to the atomic masses, volumes or volumetric equivalents of any elements in the Periodic Table. If the atoms were this simple, they would simply fly apart—there would be a dimensionometric imbalance not sustaining anything but ephemeral existence. *Remarkably, this refutes materialism at the atomic level*: Our whole basis of materialism is very simply refuted.
4. Our findings are extended, too, even beyond these New Thinking Allowed interviews where we barely deal with the newly discovered mathematically demonstrated "*third substance*" ("*gimmel*"). Gimmel is the receptacle (we propose) for a broader consciousness. Amazingly gimmel plays a role in *everything*:
 - a. The *elements of life* are in union with more gimmel than any other elements (H; O, N, C, S, Mg, Ca). This also includes, based on our calculations:
 - a.1. the element silicon—so Si has to be a "life element" and empirical studies should be able to eventually prove that is so;
 - a.2. also water is linked with more gimmel than any other molecule. That is not surprising given its fundamental requirements for life.
 - b. Remarkably we postulate strongly, with powerful structural support, that it's likely that what were called (and described) by Nobel Laureate Murray Gell-Mann as "*gluons*", appear to be *insufficient to sustain atomic functioning*. The gluon actually appears to be "gimmel", and in contrast to the original "glue" of gluons linking quarks (in neutrons and protons) together, for example, gimmel is also in union with electrons and is also quite different because it is directly involved with 9- D rotation.
 - c. Amazingly, the proportion of volumetric *Dark Matter plus Dark Energy* to the cosmos is the *same* as the proportion of Gimmel to the combination of Mass, Energy and Gimmel in equivalent volumetric units (TRUE units) to the two most abundant elements Hydrogen and

Helium, supporting our postulated hypothesis. Moreover, it appears that Dark Energy correlates with gimmel in electrons, and dark matter with gimmel in nucleons. Dark substances may be in the atom, but will require a multidimensional (likely 9-dimensional) model to explain this.

d. This apparently means that this third substance (gimmel—at some levels, likely pure consciousness) exists at every level from the subatomic to the cosmological. Every single thing in our reality has consciousness though everything has meaning and that might differ. *No longer are there rules for quantum physics, for macrophysics and cosmological physics, but they're the same rules!*

We find these findings astonishing, and there are now several others who are recognizing these as groundbreaking paradigm shifts. These findings are very recent, but have to this time largely been ignored by psi and Consciousness researchers. Yet, we have many peer-reviewed publications on these ideas: How we definitely know we have 9 spinning dimensions (9D), how 9D is further incorporated into infinity and how 9D embeds our current experiential physical reality and why materialism is mathematically refuted. And we show why there must *necessarily* be a third substance (called "gimmel"). We postulate gimmel is "consciousness" at least in part.

At times in the You-tube blurbs (below), our model, the Neppe-Close Triadic Dimensional-distinction Vortical Paradigm (more easily referred to simply as TDVP) is described as a "theory". However, the term "theory" is incorrect, because TDVP does not deal with a "*theory*" that has not been or cannot be proven. Our model is mathematically *proven*. This is the reason why scientists who have studied it in detail sometimes describe TDVP as a "groundbreaking paradigm shift".

Ironically, in another way TDVP is "theoretical" in the sense of "theoretical physics" (TP). TP often involves mathematical calculations applied to specialized physics, like particle physics, as opposed to empirically applied macrophysics in the Newtonian sense. But more correctly, TDVP should be incorporated within what we're now calling "theoretical dimensional biopsychophysics". This is because the TDVP model goes beyond just theoretical physics because it includes three key features namely *consciousness* and *extra dimensions* as well as *infinity*.

By contrast, "String Theory" is an example of a "theory" at the multidimensional level. The String Theories (and its many variants) are "theories" because they cannot yet be proven or disproven. They are postulated. The String Theories are very different from TDVP, because "Strings" usually involve e.g. foldings or curlings and extra "spaces", whereas TDVP involves rotating across dimensions allowing extrapolation mathematically as well as incorporating not only Space (likely three dimensional), but Time and Consciousness making up the 9 finite spinning dimensions.

However, TDVP is *not* a theory because we have *proven* the most important features. Instead, TDVP involves several new "paradigm shifts" because it constitutes a new radical perspective of reality: It changes the very foundations of existing reality and our way of experiencing it.

Appendix E: Videos, Audios and YouTubes:

For those who are curious, here are six of the YouTubes that are pertinent portrayed with brief descriptions. We have kept the comments on each, but changed the order of the discussions.

1. Space, Time and Consciousness <https://youtu.be/Uw9oMpz4dSU>

This describes key data pertaining to the Neppe-Close Triadic Dimensional distinction Vortical Paradigm (TDVP) paradigm shift. It reflects possibly a key fundamental change in thinking. Space, Time and Consciousness are fundamental dimensional substrates, all with their own identity, but they're tethered to each other. No longer do we talk of Minkowski's 1908 'Space-Time' being inseparable, we now must talk of Neppe-Close's 2011 metaparadigm of 'Space, Time and Consciousness' as being inseparable. All of reality is changed with Consciousness, Dimensions, and Infinity being very important. (Neppe, <30 minutes)

2 Reality Begins with Consciousness <https://youtu.be/0rVxzHk---0>

Why consciousness is so fundamental to our existence even when we don't recognize it. We begin with consciousness. And everything—animate and inanimate— necessarily has consciousness. (Neppe, <30 minutes)

3. Theories of Everything <https://youtu.be/3gZ7rVYt5vo>

This give a perspectives on why the Neppe-Close TDVP model is so much better than any other so-called "Theory of Everything" (TOE) so far proposed. There are 24 main TOEs and these include String Theory to the Reductionist Standard Model of Physics to great theorists like Laszlo, Lanza and Wilbur, to even Kabbalic mysticism and Vedic thinking. The Neppe-Close model scores a perfect 39/39 using objective criteria. Yet none others, besides the original proposed models of Neppe at 27/39 and Close at 23/39, even score 20/39. Some would argue that if a fundamental model is a TOE, it should have endured a millennium or longer: Interestingly, in many ways, TDVP appears to be the scientific expression of the mystical Kabbalah." (Neppe, <30 minutes).

All of these three interviews (1, 2 and 3) are effectively major units, but they're incomplete without the other two.

4. The nature of psi <https://youtu.be/f7uPGVFoEEA>

What is more fundamental for Consciousness Researchers? This explains not only the 9 areas of psi that show frequentist statistics of 1 in a billion against chance. Many are ignorant about this work but it is key as this is part of our reality.

Moreover, in this video, Dr Neppe alludes briefly to the Neppe-Close explanation of mechanisms of psi by applying concepts in TDVP. Therefore there is now a way to explain psi by a single mechanism. (Neppe, <30 minutes)

5. Philosophy, Mysticism, Spirituality and their links to Science.

https://youtu.be/Jt2m7gg4J_M

This relates to the Neppe-Close new philosophical model of *Unified Monism* (UM). UM apparently is the only philosophical model that derives directly from a scientific-mathematical model (TDVP). UM seamlessly connects with theories of our physical reality, as well as radical findings like survival after death, as well as allowing for psi. Dr Neppe compares Unified Monism with many philosophies. (Neppe, <30 minutes)

"Psychic" Experience and the Brain <https://youtu.be/LGMiE1b2L8>

This is fundamental and needs educating even amongst Consciousness Researchers. The temporal lobe, the great integrator of information, may be the "window into the brain for extended consciousness and psi". (Neppe, <30 minutes).

There are numerous other YouTubes on that same site (*see* www.VernonNeppe.org/presents.html) by Vernon Neppe but not specifically on TDVP.

For example, From the **Forever Family Foundation's "Signs of Life":**

Consciousness in Practice, 9 Dimensions and Memory, Time, Altered States of Consciousness Interview with Dr. Neppe for the Forever Family Foundation's "Signs of Life" radio show (2013).

However, there are also some more complex audios, on this topic.

- *9-Dimensional Spin, the Cabibbo angle and TDVP: Historical perspective* (Dr. Neppe) Please allocate 20 minutes. (Neppe)
- *Reality, 9 Dimensions, TDVP, Cabibbo, and Spin: A Perspective* (Dr Neppe) Please allocate 18 minutes (Neppe)
- *9D Spin Model and TDVP in relation to String Theory* (Drs Neppe and Close)

Please allocate 22 minutes (Neppe)

- *The Three Dimensions of Time; and can Backwards Time occur? Applying TDVP* (Drs Neppe and Close) (targeted for a general audience). Please allocate 22 minutes. (Neppe)
- *The Cabibbo Mixing Angle and 9-Dimensional Spin: Some technical mathematical and physical data* (Drs Close and Neppe) (This is technical and general listeners may find it complex). Please allocate 13 minutes (Neppe)

We strongly suggest you use this in conjunction with the material in blue font beginning. More detail on the technical aspects of the Close and Neppe Cabibbo Angle findings: on <http://www.vernonneppe.org/RESEARCH.html> as well as, of course, the E-book *Reality Begins with Consciousness* where a special Chapter 9 is specifically devoted to this discussion.

In addition to the Mishlove New Thinking Allowed series involving Dr. Vernon Neppe, Dr. Edward Close's Science and Spirituality TV You Tubes on TDVP are very educational. (see again www.VernonNeppe.org/presents.html)

Science and Spirituality TV Welcome

Introducing Science and Spirituality TV - Devoted to the pursuit of truth in the unbiased quest to unite science with spirituality in a comprehensive new scientific paradigm - a true theory of everything. For more information visit www.ERClosetPhysics.com (Close, 5 minutes)

A Real Theory of Everything

What does it take to make a theory a Theory of Everything? Combining matter, energy, space and time. Or is there something else that has to be included? (Close, 5 minutes)

What Is Unique About The Close-Neppe Theory of Everything

A Theory of Everything must not only be internally consistent, it must also provide new mathematics that can help us understand a larger part of the reality we experience. What makes the Close/Neppe Theory of Everything Unique? (Close, 5 minutes)

God's Love in Numbers - Mathematics Made Simple

Poetry, Art, Music, and Science are all attempts of the Human Spirit to understand ourselves, the world around us, and how the universe works. Mathematics is the language that we use to describe the physical laws that we find operating in the physical universe. Mathematics also relates to poetry, music and art. Why is that? Because mathematics is a simplified language. It is a reflection of the mind of God and His unconditional love is so great that when he created us he made certain we would be able to discover Him through the pursuit of truth. (Close, 3 minutes)

Putting Consciousness Into The Equations The Calculus of Distinctions

The Calculus of Distinctions is briefly described in this video. This Calculus of Distinctions developed by Edward R Close, PhD, precedes the Calculus of Newton and Leibnitz and allows the author to examine physical reality from a new perspective that incorporates Consciousness in the equations. Warning: Mathematics, Equations, something for real Scientists has been included in this video. (Close, 14 minutes)

Uniting Science and Spirituality

Why is there no currently accepted Theory of Everything? How can anyone possibly unite Science and Spirituality? What links these two disparate approaches to truth? (Close, 8 minutes)

The Most Important Question

Modern science has largely ignored the most important question, posed by one of the world's most respected scientists nearly 300 years ago. What is that Most Important Question and is an answer to that question possible? (Close, 6 minutes)

Symmetry And Stability

This explains why symmetry is necessary for stability in TDVP, the Close—Neppe Theory of Everything. (Close, 8 minutes)

The Electron, Relativity and TRUE Units (Close, 8 minutes)

Electrons, relativity and TRUE units are fundamentally linked.

Explaining the Unexplainable

Non-locality, the speed of light, and how we determine True Units! The weirdness of Quantum Physics, Relativity's guiding principle, and what the LHC tell us about True Units. Presented are necessary concepts for the non-mathematician or scientist. (Close, 16 minutes)

True Quantum Units, 3 Dimensions of Time and the Big Bang Myth

The Close-Neppe Theory of Everything unites relativity, quantum physics, and cosmology, explaining and providing new meaning for many of the mysteries of the current scientific paradigm. In this video you will learn about 2 current mysteries, how they are resolved, and what that means about the Big Bang.

1. Why is there something rather than nothing?
2. Why are Hydrogen atoms stable?
3. Why there was no Big Bang. (Close, 16 minutes)

The New Physics of Multidimensional Reality

Why is there a need for new physics beyond the discoveries of Planck, Einstein and Bohr? What is the difference between the TRUE unit and the electron? How do we know that Reality has more than 4 dimensions and does that change the way particle collider data should be interpreted? These questions are examined and answered in this video. No mathematical equations are utilized in this video. (Close, 7 minutes)

The New Science of TDVP Particles Spinning in 9 Dimensions

How do you visualize objects spinning in several dimensions? Why do elementary particles exhibit an intrinsic spin, called quantum spin number, that contributes to the angular momentum of the particle? No mathematical equations in this video. (Close, 10 minutes)

What is Mass?

If, as Max Planck said, there is no matter, then what is mass? In this video, we answer this question, and in the process answer several other questions that have puzzled physicists for decades. What are elementary particles when they are not being observed and measured? Particles? Waves? Both? Or neither? Can the answer to the questions "What is mass?" also explain non-local action-at-a-distance phenomena like gravity and quantum entanglement? (Close, 17 minutes)

What Are Dimensions?

Length, Width, Height, curled-up, space-like, time-like, separate, connected: What are Dimensions? Learn how the extra dimensions proposed in the Close/Neppe TDVP science of the future relate to familiar known dimensions, what they are, and even where they are located. This new understanding of the reality of extra dimensions opens the door to a science that includes consciousness and spirituality. (Close, 14 minutes).

T. Key Publications with Dr Neppe involving Dr Close

PUBLICATIONS BY DRS NEPPE AND CLOSE ON TDVP: ^P

▪ Books

- Neppe VM, Close ER: *Reality begins with consciousness: a paradigm shift that works (First Edition)* 1 Edition. Seattle: Brainvoyage.com, 2012.
- Neppe VM, Close ER: *Reality begins with consciousness: a paradigm shift that works (Second Edition)* 2 Edition. Seattle: Brainvoyage.com, 2012.
- Neppe VM, Close ER: *Reality begins with consciousness: a paradigm shift that works (3rd Edition)* 3 Edition. Seattle: Brainvoyage.com, 2013.
- Neppe VM, Close ER: *Reality begins with consciousness: a paradigm shift that works (4th Edition)* 4 Edition. Seattle: Brainvoyage.com, 2013.
- Neppe VM, Close ER: *Reality begins with consciousness: a paradigm shift that works (5th Edition)* 5 Edition. Seattle: Brainvoyage.com, 2014.
- Neppe VM, Close ER: Brief glossary of key terms in *Reality Begins with consciousness: a paradigm shift that works (5th Edition)*. Edited by. Seattle, WA: Brainvoyage.com. pp. lxiv-lxxiv 2014.
- Neppe VM, Close ER: *Reality Begins with Consciousness (RBC) — Glimpses and Glossary* 1st Edition. Seattle, WA: Brainvoyage.com, 2013.
- Neppe VM, Close ER: *Reality Begins with Consciousness (RBC) — Glimpses and Glossary* 2nd Edition. Seattle, WA: Brainvoyage.com, 2014.
- Neppe VM, Close ER: *Reality Begins with Consciousness (RBC)—Key Features* 1st Edition. Seattle, WA: Brainvoyage.com, 2013.
- Neppe VM, Close ER: *Reality Begins with Consciousness (RBC)—Key Features* 2nd Edition. Seattle, WA: Brainvoyage.com, 2014.

▪ Consciousness

- 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.
- Neppe VM, Close ER: Re-examining the consciousness concept (Part 1) *Journal of Psychology and Clinical Psychiatry* 1: 00036: 6; 1-4, 2014.
- Neppe VM, Close ER: Explaining consciousness: an EPIC re-examination (Part 2): the how, the what, the why and the where *Journal of Psychology and Clinical Psychiatry* 1: 00036: 6; 4-8, 2014.
- Neppe VM, Close ER: Integrating aspects of the EPIC consciousness model (Part 3) *Journal of Psychology and Clinical Psychiatry* 1: 00036: 6; 8-14, 2014.
- 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.

^P This bibliography is not meant to be complete but gives an index of some key papers and publications.
Neppe V, Close E. Nutshell on TDVP. *IQNJ* 8:3, 7-79 September 2016. V10.36

▪ **Conundrums and mysteries**

- Neppe VM, Close ER: How some conundrums of reality can be solved by applying a finite 9-D spinning model. *IQNexus Journal* 7: 2; 7-88, 2015.
- 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.
- Close ER, Neppe VM: Translating fifteen mysteries of the universe: Nine dimensional mathematical models of finite reality, Part II. *Neuroquantology* 13: 3; 348-360, 2015.
- 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.

▪ **Cosmology, Dark Matter and Dark Energy**

- 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.
- Neppe 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. *IQNexus Journal* 8: 3; 80-100, 2016.
- Close ER, Neppe VM: Do we live in an accidental universe of random coincidences? (Part 6). *IQNexus Journal* 7: 4; 30-32, 2015.

▪ **Gimmel**

- 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.
- Close ER, Neppe VM: Introductory perspective to the God matrix. Part 2. *World Institute for Scientific Exploration (WISE) Journal* 4: 4; 5-12, 2015.
- Close ER, Neppe VM: Atomic materialism, the periodic table and generalizing cosmologically. Part 3. *World Institute for Scientific Exploration (WISE) Journal* 4: 4; 13-17, 2015.
- Close ER, Neppe VM: Preliminary ideas on gimmel that need confirmation. Part 4. *World Institute for Scientific Exploration (WISE) Journal* 4: 4; 18-20, 2015.
- 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, 20
- 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.

- Close ER, Neppe VM: Empirical exploration of the third substance, gimmel in particle physics (Part 10). *IQNexus Journal 7: 4*; 45-47, 2015.
- 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.
- Close ER, Neppe VM: Hydrogen and the elements of the periodic table: applying gimmel (Part 13). *IQNexus Journal 7: 4*; 66-69, 2015.
- Close ER, Neppe VM: Stability and particle bonding (Part 15). *IQNexus Journal 7: 4*; 71-77, 2015.
- Close ER, Neppe VM: The tertiary level of symmetric stability – molecular bonding (Part 16). *IQNexus Journal 7: 4*; 78-81, 2015.
- Close ER, Neppe VM: More questions answered on the elements, TRUE and gimmel (Part 17). *IQNexus Journal 7: 4*; 82-102, 2015.
- Close ER, Neppe VM: Filling in the gaps of volumetric stability (Part 18). *IQNexus Journal 7: 4*; 103-109, 2015.
- 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.
- Close ER, Neppe VM: Summary and conclusion gimmel, TRUE and the structure of reality (Part 20). *IQNexus Journal 7: 4*; 112-114, 2015.

• **Gluons**

- 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.
- Neppe VM, Close ER: Speculations about gimmel Part 5. *World Institute for Scientific Exploration (WISE) Journal 4: 4*; 21-26, 2015.

▪ **Infinite**

- Neppe VM, Close ER: The infinite (Part 13B). *IQNexus Journal 7: 3*; 117-120, 2015.
- Neppe VM, Close ER: The discrete finite contained in the continuous infinite: some speculations (Part 13C). *IQNexus Journal 7: 3*; 120-122, 2015.

▪ **LFAF**

- 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.
- 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.

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- **Mathematics**

- Close ER, Neppe VM: The role of mathematics in investigating the nature of reality (Part 4). *IQNexus Journal 7: 4*; 22-26, 2015.
- Close ER, Neppe VM: Elementary particles and units of measurement: applying the conveyance equation (Part 11). *IQNexus Journal 7: 4*; 48-54, 2015.

- **Nine dimensions**

- Close ER, Neppe 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.
- Close ER, Neppe 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.
- Close ER, Neppe VM: The Cabibbo Mixing Angle (CMA) derivation: Is our mathematical derivation of the Cabibbo Mixing Angle (CSMA) equivalent? *IQNexus Journal 7: 4*; 120-128, 2015.
- Close ER, Neppe VM: Support for the hypothesis of a 9-dimensional spin finite reality model (Part 7). *IQNexus Journal 7: 4*; 33-35, 2015.
- Close ER, Neppe VM: The nine-dimensional finite spin model (Part 14). *IQNexus Journal 7: 4*; 70, 2015.

- **Philosophy of science**

- 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.
- Neppe VM, Close ER: The need for a new paradigm, in *Reality begins with consciousness: a paradigm shift that works (5th Edition)*. Edited by. Seattle: Brainvoyage.com. pp. 54-58 2014.
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A series for the curious non-scientists.

These titles are provisional. This series of books *Answers That Make Sense* are targeted for late 2016, but may be published during early 2017. These books will be short and published mainly through Amazon.

- Neppe VM, Close ER: *Solved! Answers That Make Sense —1. First Edition. Seattle: Brainvoyage.Com, 2017.*
- Neppe VM, Close ER: *The God Matrix: Answers That Make Sense —2. First Edition. Seattle: Brainvoyage.Com, 2017.*
- Neppe VM, Close ER: *Spirituality And Science: Answers That Make Sense —3. First Edition. Seattle: Brainvoyage.Com, 2017.*
- Neppe VM, Close ER: *Solutions To Great Mysteries: Answers That Make Sense —4. First Edition. Seattle: Brainvoyage.Com, 2017.*
- Neppe VM, Close ER: *Solutions To Great Mysteries: Answers That Make Sense —5. First Edition. Seattle: Brainvoyage.Com, 2017.*

Upcoming books for scientists

These titles are provisional. This series of books *Exploring Reality Science Series* are targeted for late 2016, but may be published during early 2017. *Full-length scientific books: Each 150-225 pages.* It is anticipated these will be electronic books.

- 1U. Neppe VM, Close ER: *Beyond Our Usual Perspectives: Exploring Reality Science Series 1. First Edition. Seattle: Brainvoyage.Com, 2017.*
- 2P Close ER, Neppe VM: *Beyond Our Physical World: Exploring Reality Science Series 2. First Edition. Seattle: Brainvoyage.Com, 2017.*
- 3O Close ER, Neppe VM: *Beyond Our Puzzles Of Space, Time And 'Consciousness': Exploring Reality Science Series 3. First Edition. Seattle: Brainvoyage.Com, 2017.*
- 4.C. Neppe VM, Close ER: *Beyond Our Paradigms of Consciousness: Exploring Reality Science Series 4. First Edition. Seattle: Brainvoyage.Com, 2017.*
- 5. Neppe VM, Close ER: *Beyond Our Psychological World: Exploring Reality Science Series 5. First Edition. Seattle: Brainvoyage.Com, 2017.*
- 6L Neppe VM, Close ER: *Beyond Our Philosophical World: Exploring Reality Science Series 6. First Edition. Seattle: Brainvoyage.Com, 2017.*
- 7. Neppe VM, Close ER: *Beyond Our Psi Experiences And Infinity: Exploring Reality Science Series 7. First Edition. Seattle: Brainvoyage.Com, 2017.*
- 8. Close ER, Neppe VM: *Beyond Our Proofs Of Conventional Mathematics: Exploring Reality Science Series 8. First Edition. Seattle: Brainvoyage.Com, 2017.*
- 9. Neppe VM, Close ER: *Beyond Our Present Paradigms: Exploring Reality Science Series 9. First Edition. Seattle: Brainvoyage.Com, 2017.*



U. Addendum: The original press release on the Whiting Award.

2016 Dr. Vernon Neppe and Dr. Edward Close Special Press Release: Dr Vernon Neppe and Dr Edward Close recognized with the prestigious ISPE international prize: The Whiting Memorial Award for 2016.

Dr. Edward Close and Dr. Vernon Neppe were awarded the coveted 2016 Whiting Memorial Award for “*expanding the boundaries of scientific understanding*”. The Whiting Memorial Fund is a philanthropic fund administered by the International Society for Philosophical Enquiry (‘ISPE’) (www.thethousand.com) to “*reward individuals and groups, whose accomplishments and goals exemplify the ideals of ISPE*”. The award was announced in August 2016, and this Press Release of October 2016 is the official press release.

This international award is open to anyone worldwide in any discipline, and is given to a person/ persons or organization (outside or within ISPE) who typifies the ISPE ideal of “*someone who strives to benefit society in general through advanced enquiry, original research and/or creative contributions, and who has demonstrated significant progress in these endeavors.*” This sought after prize may be conferred yearly, but historically has seldom been awarded, because it is only conferred when the committee unanimously chooses a worthy nominee. ISPE’s only mission is “*to attract the world’s most intellectually gifted individuals and hopefully direct their achievements for the betterment of all humankind.*” ISPE advances no political, governmental, religious, race, gender, ethnic, activist or academic agenda. “*This is what ISPE is all about: Making our world better by encouraging profound excellence*”, emphasized Stephen Levin, the ISPE President. “*This award should have happened a long time ago to Drs Neppe and Close. It’s well-deserved and too long coming.*”

What is unique is that the ISPE organization played a major role in this first joint award of the Whiting Prize: Vernon Neppe MD, PhD, Fellow Royal Society (SAF), and Edward Close PhD, PE, actually met through their ISPE membership. Moreover, these two scientists deliberately specifically joined ISPE in the hope of finding another ‘Thousander’ to collaborate with in developing a unified theoretical model for reality:

For Close: “*We had both already developed our own models but we regarded that as insufficient. We needed to combine any expertise and knowledge we had to progress with this task, which we regarded as, and still regard as, the ‘song we’re singing in this world’.*” And Neppe continued: “*Yes. This work has gone beyond us and we realize that development of an entirely new model of reality is of groundbreaking importance, but it might take decades to be fully recognized. We hope it will not take that long, and this award might serve as a wake-up call recognizing*

- *the unification of everything,*
- *about Space, Time and Consciousness being three different, but always unified, dimensional substrates,*
- *the presence of the third substance, gimmel,*
- *9 finite spinning dimensions and*
- *our current 3 dimensions of space in a moment in time just reflect our experience, and*
- *the importance of infinity in our everyday life.”*

Close chimed in: “*And of course, the practical relevance for the future of science is potentially enormous, now that we understand more about dark matter being linked with both gimmel (which is likely consciousness) and requiring the 9-dimensional model to understand it. Effectively, this implies that the same rules of nature apply at every level be it in Quantum Physics, Cosmology or our ordinary reality.*” “*Moreover, we now understand that atoms cannot just consist of protons, neutrons and electrons, as we were taught in schools, and even when we add in subatomic particles in protons and neutrons, it still does not work. Additionally, we can begin to appreciate the complexities of the so-called ‘particle soup’ of ephemeral particles like the Higgs Boson. In effect, we can predict the needs for stability in the elements that constitute our cosmos, and even more so, the requirement of symmetry in the specific Elements of Life. It’s quite exciting to understand why the Periodic Table of the Elements is structured as it is, once we combine in features such as gimmel, electron spin and 9 dimensions.*” Neppe added.

“*All these findings are, with respect, groundbreaking, and our current and future scientists can build on these new foundations.*” Close concluded,

The Whiting Prize has not been awarded to an ISPE member since 2008. The ISPE is a worldwide 1 in 1000 intelligence organization, currently with about 500 members. This society emphasizes progression through different levels of accomplishment. Drs Close and Neppe have both attained the highest public level of ‘Diplomate of the ISPE’.

This is not their first award for their research: In February 2013 in Puebla, Mexico, Dr Neppe and Dr Close received the well-respected ‘Gabino Barreda Award’ and medal involving an earlier version of their critically important metaparadigm ‘Triadic Dimensional Distinction Vortical Paradigm’ (TDVP).

By that stage, Close and Neppe had empirically shown how Space, Time, and Consciousness (STC) are all separate, and not just one being ‘a derivative of the other’ in our 3S-1t reality. Instead, STC is always in union. They further argued cogently that we have gone beyond Minkowski’s 1908 union of ‘Space-Time’. Instead, as of 2011, they proposed a union of ‘Space-Time-Consciousness’ (STC). To Neppe, “*no longer were we referring to ‘Space-Time alone’, but to the required union of the three. ‘Consciousness’ has its own primacy, yet manifests differently: In our current reality experience we might barely notice it, yet at the infinite levels, it contains all of Space and Time.*”

Neppe V, Close E. Nutshell on TDVP. IQNJ 8:3, 7-79 September 2016. V10.36

This Space-Time-Consciousness (STC) union is strongly substantiated in their massive 500-page, 50-chapter book *Reality Begins With Consciousness: A Paradigm Shift that Works* (www.brainvoyage.com). This book is now in its 5th Edition, and they have further published hundreds of peer-reviewed publications. Neppe and Close contended there must be a 'triad': These three substrates of Space, Time and the Extent of Consciousness are, and have always been inseparably tethered together in everything. 'Consciousness' in this context has its own dimensional 'extent' identity—this 'extent' of consciousness is necessarily inseparably tethered to Space and Time. The authors have been very careful to carefully define and operationalize terms such as 'consciousness' and 'dimensions'.

They also demonstrated that the Neppe-Close model of the 'Triadic Dimensional-Distinction Vortical Paradigm' (TDVP) is very versatile in explaining numerous facets of reality without contradiction: TDVP scores perfectly on criteria applied for a so-called 'Theory of Everything' (TOE). TDVP scores 39/39; other than their own previous models at 27 and 23/39 respectively; yet, none of the 21 others examined scored even 20/39.

Furthermore, they had also extended TDVP to philosophy, and proposed a mind- brain philosophical model that could justify, on the one hand, our regular three spatial dimensions in a moment of time experience of reality, as well as the infinite, survival after death, altered states of consciousness, and psi. They argued, too, that life and order have links with the infinite, and that there is still meaning in the inanimate. These concepts constitute the Neppe-Close philosophy of *'Unified Monism'*. This is a consequence of the Neppe-Close TDVP scientific and mathematical model and is well supported. It allows a different perspective from the other philosophically restricted options that argue that consciousness is derivative or an epiphenomenon of Space-Time or consequent of Mass-energy (a variant of materialism), or the converse, with Space-Time or Mass-Energy being derived from consciousness (as a variant of Idealism and linked with many Eastern philosophies). Moreover, Unified Monism does not require a variant of dualism because the finite is embedded within the infinite and higher dimensional domains contain lower ones producing a unification.

The 2013 Gabino Barreda Mexican prize awarded to Close and Neppe was the direct result of their findings, up to that time. But they preceded what might have developed into even more major contributions. This time, Neppe and Close could prove their work mathematically and extend that math in paradigm shifting ways. In a way, the 12-month period from late 2015 onto 2016 has been their *'Golden Year'* with profound discoveries that are radical, groundbreaking and change the whole conception of reality. Remarkably, many of their findings are beyond speculations because they have been mathematically proven, applying techniques they've developed namely the *Close Calculus of Distinctions and Dimensional Extrapolation*. Furthermore, they have applied *'Diophantine Equations'* in mathematical number theory to show the importance of cubic integral equations producing a *'Conveyance Equation'* which can describe fundamental reality and consciousness in the process.

Firstly, these scientists were able to demonstrate mathematically that finite reality involves 9 spinning dimensions and our current experience is just a part of that. This they did by deriving the Cabibbo angle, something never before done despite 50 years of trying by physicists. This finding was then replicated, and several other components relating to intrinsic electron spin and the hidden electron cloud were solved.

Next, and dramatically, arguably their most important series of findings, Close and Neppe showed that all particles are in union with a property they had hypothesized called *'gimmel'*. This gimmel is the necessary third mass-less and energy-less substance. It is in union with all mass and energy. Gimmel is thought to be 'consciousness' at least in part. They, furthermore, have shown that every fermionic particle at the subatomic level has different gimmel properties, something that they hypothesize may be important because it might imply 'meaning'.

Remarkably, they demonstrated several other major related findings:

1. *The materialistic model of the atom based on the Periodic Table of the Elements is untenable.* This is demonstrated through calculating the volumes, and volumetric equivalents or mass equivalents of protons, neutrons, and electrons. In each instance, this triad alone cannot produce whole atoms: *"We cannot have a fraction of an atom,"* Dr Neppe points out. The only way the atoms can be stable is through there being something else (gimmel) to make them stable—otherwise the atoms would simply fly apart. The same rules applies even when adding in subatomic particles like quarks. *"There needs to be that extra component for the atom to remain one,"* Edward Close added.

2. *Gimmel appears to be Gluons.* This amazing proposal changes a fundamental area of particle physics showing that a concept that won a Nobel Prize is incorrect (Laureate Murray Gell-Mann). Gluons are not linked with electrons; and gimmel is necessarily so linked: In fact, we have found there is more gimmel in union with electrons (105 for each electron), than any other finite subatomic substance. (Neppe and Close have been working on the amount of gimmel in photons. They have hypothesized that relative to our usual experience in three spatial dimensions in a moment of time, photons be may be associated with the same as linked with electrons based on the Einsteinian photo-electric effect, but relative to certain dimensional domains such as the infinite, photons have an infinite amount of gimmel).

3. *There are special gimmel properties for all the elements of life.* They have shown that the elements of life (H, O, N, C, S, Ca, Mg) and the inert gases (He, Ne) contain an atomic profile in TRUE units ('Triadic Rotational Units of Equivalence') that distinguish themselves from all others. These elements (and water) are also cubic multiples of 108 cubed. They also showed, by applying these mathematical means, that:

- Silicon should be an element of life;
- Water has more gimmel than any other compound;
- Hydrogen, which lacks a neutron, has compensating 'gimmel' or 'daled';
- Phosphorus must be asymmetric; and
- Iron, though not a life element but a carrier of oxygen, has more gimmel because of its size.

4. *They made an ostensible breakthrough in Cosmology:* The proportions of dark matter and dark energy to the cosmos

correlate exactly with the ratio of gimmel to TRUE in the equivalent cosmological elements, namely predominantly Hydrogen and also Helium. Amazingly, the ratios correlate at the 1 in 1250 level. This means that gimmel must be in the cosmos and given that Close and Neppe propose that gimmel is consciousness in some way, it would mean there is consciousness even in Cosmology.

5. *Even more remarkably, they further provide significant evidence that these dark substances to the atom:* Just this month (September 2016), these two scientists have made another dramatic published peer reviewed discovery: It is likely that dark matter correlates with gimmel in the nucleons, dark energy with gimmel in the electrons, and that these dark substances are 'contained' in the atom. However, just as gimmel is conceptualized in a 9-dimensional finite spin model, so must dark matter and dark energy be. This remarkable discovery might explain the location of dark substances, and again suggests amplifying the a role for consciousness.

6. These dark matter and dark energy findings suggest that *the same laws of nature apply for quantum, macroscopic and cosmological levels, something different from current thinking which talks about 'quantum weirdness' and separate rules.* Moreover, this research further supports the fundamental understanding of physics by applying the Close-Neppe 9-dimensional spin model, applying the extended boundaries for our finite reality.

7. The basis of the gimmel work is being able to demonstrate that isotopes of the elements that *exist* in the universe, must be *stable*, and the life and some noble elements must be symmetrical. Their work also significantly clarifies why the different electron shells are the sizes they are, ideas of valence, why spin is needed, triadic quarks and sets up a structure for Periodic Table of the Elements but with gimmel as part of that structure.

8. Indeed, Neppe and Close have pioneered the whole new interdisciplinary science of '*Dimensional Biopsychophysics*' which goes beyond our length, breadth and height registered in a moment (the present) in time ('3S-It'). Dimensional Biopsychophysics integrates consciousness, 'dimensionometry' (multidimensional geometry), and the interface of the biological, psychological and physical. This specialty was needed to fully cover their remarkably innovative multidisciplinary paradigm shift of the '*Triadic Dimensional Distinction Vortical Paradigm*' (TDVP; also called TDDVP). Applying their 9 dimensional finite spin model and combining it with gimmel, even psi phenomena and entanglement become comprehensible and feasible. "*This is even more so when we recognize that our whole reality is one, with a finite reality consisting of innumerable quantal, pixilated components embedded within a continuous, unbroken infinite existence that extends eternally in time, is without end in space, and is a repository for consciousness that is forever,*" added Dr Neppe.

9. Effectively, the Neppe-Close work goes a long way toward demonstrating that Gould's ostensibly two diverse 'non-overlapping magisteria' of *spirituality and science* appear incorrect: Science and the mystical are actually linked together! This unification is not only reflected in Unified Monism where the philosophical underpinnings are expressed directly from the science of TDVP.

There is a possibly even more cogent argument: After publishing the first edition of the book *Reality Begins with Consciousness*, the two scientists discovered that the axiomatic aspects of TDVP parallel almost exactly the great mystical philosophy of Kabbalah (which emphasizes how Space, Time and Consciousness all exist separately as opposed to being derivative). Dr Neppe amplified: "*Initially, when I heard this, I thought 'here we've spent thousands of hours and it's all in Kabbalah!' And then I realized that any fundamental truths have likely endured thousands of years. We consider the foundations of TDVP to be fundamental. Consequently, we would possibly expect that the underlying ideas of TDVP should have been reflected in a mystical philosophy that has endured for millennia. Indeed, the more we look into TDVP, the more we find that many other Kabbalic concepts are linked. But to boot, we've discovered that TDVP amplifies the more detailed underpinnings of the Kabbalic philosophy. Remarkably, it's reciprocal.*"

Ed Close added: "*There is even more. TDVP involves far more than just the unproven mystical, something we would regard as metaphysical. TDVP also appears to incorporate the mathematical and scientific demonstrations of the foundations of reality,*" "*Moreover, the mathematics is an undeniable tied-together integral part of the broader reality of our existence, not just a way of calculating. Language and symbolic logic all go hand in hand together. This is very structure of reality. This is a further reason why we argue that Science and Spirituality are far more unified than we thought.*"

10. Additionally, Vernon Neppe and Edward Close have introduced a new way of evaluating scientific data, namely 'Lower Dimensional Feasibility, Absent Falsification' (LFAF). Neppe explained: "*Ever since Carl Popper, science has revolved around 'falsifiability'. However, we recognize that sometimes we need more than that. We need to examine what is feasible and yet has not been falsified. We need to recognize that feasibility is, indeed, a critical part of science as well.*" Close added: "*Without LFAF, we cannot regard most of the data on evolution as scientific, yet we do; and we are not able to 'prove' much of the practice of Medicine and also the Psychological Sciences. Much of cosmology looks at what is feasible but unproven, and of course, all the multidimensional proposals (including our own TDVP) often require proofs that recognize pieces of a jigsaw puzzle that are available to us in 3S-It, and yet the data extend far beyond that. This is why this LFAF extension of the Philosophy of Science may be critically important to future scientists.*" Close excitedly added an aside: "*This is a reflection of Gödel's incompleteness system— a finite system is never complete. Reality is infinite and any finite model will always have an open end that cannot be proven. LFAF is the recognition of this: We need to look at feasibility even though we cannot falsify it, because it is outside the structure of the system.*"

Neppe and Close emphasize that over this time-period, neither the fundamental nor the demonstrably provable hypotheses of TDVP have been refuted. Even more so, with each passing year, sometimes every week, their model has become stronger. Some, such as Drs David Stewart and Adrian Klein, who know their work better than anyone else, regard TDVP as the single most important paradigm shift this century because it is groundbreaking, extending yet not denying the model of the current standard reductionist physical model:

• Dr David Stewart, PhD, DNM. Physicist, Mathematician: "*I rank Dr. Edward R. Close and Dr. Vernon M. Neppe as peers of the major authors of modern physics and mathematics. I equate them with greats, such as Planck, Einstein, ... Newton.... Their work*

has clarified, and extended the science and mathematics that these geniuses originated ...I foresee the day when they will both be awarded other honors, such as a Nobel Prize in Physics and (equivalent in) Mathematics.”

- Dr Adrian Klein, MDD, PhD, PhD, Israeli Dimensional Biopsychophysicist and Consciousness Researcher: “*The 21st Century’s revolutionary paradigm shift*”; ... “*unprecedented brilliance and potentially limitless scientific and philosophical outreach ...yielding a fresh and accurate understanding of various investigation fields of Nature, and opening ... groundbreaking development perspectives for Sciences (emphatically plural!)*”.

- Dr Alan Hugenot DSc, Physicist and Engineer and ‘Thousander’: “*When taken altogether, the entire work is worthy of several separate Nobel Prizes.*”

Dr. Close with Dr Neppe can be regarded as pioneers of the new interdisciplinary science of ‘*Dimensional Biopsychophysics*’, in which dimensionometry, consciousness and the interface of the biological, psychological and physical are integrated together. This specialty that was needed to fully cover their remarkably innovative multidisciplinary paradigm shift of the Triadic Dimensional Distinction Vortical Paradigm (TDVP; TDDVP). These scientists look forward to furthering their work and facilitating others to incorporate these concepts into their further research. They have never received any funding and hope this recognition may be an impetus for this to change.

For the present, we can direct readers to www.tdvp.org/. More detail will be found particularly at www.tddvp.com/ plus a link to a special dynamically updated chronological ‘Nutshell monograph’ summarizing the Neppe-Close TDVP contribution: Neppe VM, Close ER. *A Nutshell Key Perspective on the Neppe-Close ‘Triadic Dimensional Distinction Vortical Paradigm’ (TDVP)*. IQNJ 8:3 7-79, 2016. This is available through www.pni.org/key/WhitingNutshell.pdf

Readers might also find the YouTubes on www.vernonneppe.org/presents.html/ illuminating, plus research pages like www.vernonneppe.org/research.php/ and Dr Edward Close’s blogs on www.erclousetphysics.com.

Even without their common contributions, these scientists have made many very notable contributions to society.

Dr Vernon Neppe:

Based on peer-reviewed publications, presentations, international honors and medicolegal consultations, Prof. Vernon Michael Neppe has achieved an international reputation in numerous and diverse disciplines: For example, these include five fundamental but related medical specialties, namely Neuropsychiatry, Behavioral Neurology, Psychopharmacology, Forensic Psychiatry and Neuropsychiatry, and Psychiatry. In all of these disciplines, he has been listed under (the peer chosen) “America’s Top Doctors. Moreover, he is one of the few to be listed in all sixteen issues of this peer-reviewed book (2001-2016) and is, apparently, the only physician ever listed under any five different subspecialties (Castle Connolly). He practices these disciplines as Director of the Pacific Neuropsychiatric Institute (PNI) in Seattle, WA, USA. The PNI is the first private Neuropsychiatric and Behavioral Neurological clinical, research and educational corporation. Dr Neppe founded the PNI in 1992, as the first private such institute targeted as a model for Neuropsychiatry and Behavioral Neurology in the USA and internationally.

Vernon’s other international peer-reviewed recognitions based on publications and also international conference lectures, are as an epileptologist, movement disorder specialist (in tardive syndromes), physician, consciousness researcher, neuroscientist, forensic expert, philosopher (mind-body; and philosopher of science), phenomenologist, creativity and exceptional intelligence specialist, research mythologist, systems theorist, psychologist, author, playwright, and educator. He has returned to the love of his early childhood when he was a documented ‘creative prodigy’ in mathematics. It was partly through this that Neppe and Close extended their work to the infinite, extending the works of the mathematicians Kurt Gödel and Georg Cantor. Neppe also developed the ‘Neppe-Close conjecture’ in Number Theory Math. Further, TDVP applications include applying his concepts of the transfinite and of mathematical ordinals.

Prof. Vernon M Neppe’s formal letter qualifications are: MD, PhD (Med), FRSSAf, DFAPA, BN&NP —Behavioral Neurology and Neuropsychiatry (UCNS), FFPsych (SA), MMed (Psych), Dip PsychM —Psychiatry And Neurology, MB, BCh, BA, Dipl Amer Board Psychiatry & Neurology —Psychiatry, Geriatric Psychiatry (-2011), Forensic Psychiatry (-2004), Amer Board of Forensic Examiners —DABFE, DABFM, DABPS (Psychopharmacology), FACFE, FAPA, FCPsych, MB, BCh, BA, FRCPC (-2011), LMACFE, FCPsych, MB, BCh, BA, DSPE, DPCP (ECAO). This makes him likely one of the most highly qualified individuals in the world based on postnominals alone.

Dr Neppe was elected a Fellow of the Royal Society of South Africa, apparently being the first physician living in the USA to be so honored. He was also elected a Distinguished Fellow of the American Psychiatric Association. He is also Executive Director and the only ‘Distinguished Creative Polymathic Professor’ of the Exceptional Creative Achievement Organization (www.ecao.us). This level is based on objective, verifiable, creative scoring accomplishments. He has also been appointed Director of the Human Performance Enhancement Division (HPED) of the World Institute of Scientific Exploration (WISE). Already, in 1982, in South Africa, Vernon received the ‘*Marius Valkhoff Medal*’ for “*exceptional contributions to ... research*”, an international award given occasionally (eleven recipients in 30 years).

Prof Neppe has written eleven plus books and published about 700 papers worldwide. He has lectured in a dozen countries, and given ‘grand rounds’ to about 90% of medical school or affiliates in the United States on dozens of diverse topics. He led the first USA and International Delegation in Neuropsychiatry and Psychopharmacology. He has chaired international symposia on four continents. Some of his books are available on www.brainvoyage.com. These include his individual favorite ‘*Cry the Beloved Mind: A Voyage of Hope*’ (written for laypersons, colleagues, patients and their families), four books/ e-books on the déjà vu phenomenon, and two specialist books *Innovative Psychopharmacotherapy* and a monograph for attorneys relating to expert medical consultants, and two plays, plus 3 with Dr Close on TDVP. For many years, he also edited a journal listed by Psychinfo, was guest editor of the Journal of Clinical Psychiatry, and he still is on many editorial or advisory boards.

Dr Neppe became the first Director of a Division of Neuropsychiatry in a USA Medical School (University of Washington in 1986) having been recruited specifically from South Africa after a national USA search failed to find a suitable American candidate. Subsequently, since 1992, he continued to maintain his official academic linkages, and has since then retained his Adjunct Full Professor, St. Louis University (now the Department of Neurology and Psychiatry) appointment.

He is also a prominent internationally-known forensic specialist. He was educated predominantly in South Africa at the University of the Witwatersrand, Johannesburg (MB, BCh, DPM, MMed, PhD). He also trained at Cornell University in New York with the first Fellowship involving Neuropsychiatry, Psychopharmacology, Epileptology and Chronobiology: This was during his tenure as the ‘Witwatersrand University Overseas Traveling Fellow’ generally awarded to one faculty or student per year in the whole University.

His contributions have been prodigious: He has developed 36 scientific copyrighted clinical and research instruments. These include *Neppe V, Close E. Nutshell on TDVP. IQNJ 8:3, 7-79 September 2016. V10.36*

published measures of higher brain function: ‘BROCAS SCAN’ (‘Screening Cerebral Assessment of Neppe’); ‘Subtle Organic Brain Inventory of Neppe’ (SOBIN); ‘The Inventory of Neppe of Symptoms of Epilepsy and the Temporal Lobe’ (INSET); a package of 9 neuropsychiatric follow-up monitoring screens (the ‘DS-9’); the Headache-Symptoms questionnaire. Also included are specialized tests like the ‘Neppe Narcolepsy Questionnaire (NNQ), and the ‘STRAW’ for movement disorders, and the ‘SONAR’, a daily symptom comparison. Another evaluation that is frequently useful is the ‘PESS’—the PNI Evaluation of Sexual Symptoms. These seventeen neuropsychiatric evaluations are used routinely at the PNI (when appropriate).

Dr Neppe has also modified and developed several clusters of tests for baseline and if need follow-up evaluation, including screens for attentional disorders, for bipolar illness.

Dr Neppe was recognized in the disciplines of Psychopharmacology and Neuropharmacology by his autobiographical contributions being published by the leading Neuropharmacology group in the world, the CINP, as “one of the *Leading Psychopharmacologists of the Twentieth Century*”. Two aspects were particularly highlighted: Dr Neppe developed the most successful treatment for the previously incurable condition of tardive dyskinesia (high dose buspirone 1989, latest tardive dyskinesia work 2016). Moreover, along with two others, he pioneered the use of anticonvulsants in psychiatry (Carbamazepine): This has positively impacted the lives of millions of patients and their families.

He also has pioneered numerous pharmacological, clinical, and classification areas. He also published classifications of Epilepsy and Psychiatry, and of Head Injuries. He, also, is the world’s leading expert on the déjà vu phenomenon, and has written four books in that area alone. He has described several new medical conditions including the various *Paroxysmal Neurobehavioral Disorders*, and developed tens of new medical, psychological, consciousness and now dimensional biopsychophysics terms. He also invented two new literary forms: the literary genre of ‘sciction’ and the writing form called the ‘*conversagraph*’. He has pioneered many aspects of Consciousness Research and Phenomenology.

His websites are: Pacific Neuropsychiatric Institute, Seattle, WA, USA (www.pni.org/);

The Vernon Neppe Gateway (www.VernonNeppe.org/);

Vernon Neppe Research Site (www.VernonNeppe.com/);

Vernon Neppe’s books (www.brainvoyage.com/), plus links with the Exceptional Creative Achievement Organization (www.ecao.us/) and the HPED <http://instituteforscientificexploration.org/human-performance-enhancement-division/>.

Dr Edward Close

Dr Edward Roy Close, PhD, PE, DSPE, DCF (ECAO) is also extraordinarily accomplished in his own right. Based on his contributions, publications and books, and presentations, he is an internationally accomplished Physicist, Mathematician, Cosmologist, Environmental Engineer and Planner, and Consultant. As a charter member of the U.S.G.S. Systems Analysis Group, Close developed state-of-the-art mathematical optimization programs, hierarchical modeling techniques and fractal geometry models of coastal geomorphology, storm cell development and other environmental modeling applications. Pursuing an active research program in environmental remediation, Ed has made a series of breakthrough discoveries in using non-toxic compounds in mold research that have benefited millions. His book *Nature’s Mold Rx* is a classic. He was a Charter Member of the extant internationally known ‘Integrated Health-Care Professionals Council’. He also has significant expertise in the essential oils.

Besides his three books with Dr Neppe and several more in press, he has authored numerous technical papers and five books, including the groundbreaking *‘Transcendental Physics: Integrating the Search for Truth’*. He has made some remarkable mathematical contributions: He pioneered and developed the ‘calculus of distinctions’ (later on with a small assist from Dr Neppe), an extraordinary accomplishment. And his earlier book, *‘Infinite Continuity’* is a remarkable stepping-stone for the Neppe-Close TDVP.

In 1965, Close described the first (later) published proof (FLT65) for possibly the most famous math conjecture, ‘Fermat’s Last Theorem’ (FLT). The FLT solution befuddled thousands of mathematicians who tried to solve it over three and a half centuries. Dr Close’s solution has, through 2016, been examined by tens of professional mathematicians including intensively over the past three years, and yet has never been refuted. Some of these experts have made suggestions or queried areas, but in every instance, further analyses by mathematicians have demonstrated the ostensible criticisms to be irrelevant to the FLT proof, or incorrect. The Close solution (FLT65), was published initially as an Appendix to Close’s *Book of Atma* in 1977, but remarkably, is only several pages. That contrasts with Sir Andrew Wiles’s later accepted 1994 proof of over 150 pages.

Dr Close also developed a technique called ‘Dimensional Extrapolation’, allowing for movements across dimensions, something extremely important for TDVP’s 9-dimensional derivations. He has also developed several new theorems of consciousness, concentrating on Number Theory and contributed important engineering applications. It was he who first demonstrated that the little known Cabibbo Angle could be derived from 9 dimensions. There are now several demonstrations of the 9-dimensional proof of our finite reality. Edward Close is described by Vernon Neppe as “*the most creative mathematician alive*”

Dr. Close is Principal Engineer and Director of Research and Development at EJC Advantage, LLC. He is currently Science Editor of *Telicom*, the journal of the International Society for Philosophical Enquiry (ISPE) (www.thethousand.com) (a position previously occupied by Dr Neppe). He is also a Distinguished Research Fellow of the Exceptional Creative Achievement Organization (Seca.com). His doctoral education included graduate work at several universities, including one year in residence at Johns Hopkins University. See www.erclsetphysics.com/

Immediate Future

Drs. Neppe and Close or Drs. Close and Neppe are currently working on (at this point) 9 full-length (150-250 page) new books for colleagues. All titles begin ‘*Beyond Our... Exploring Reality Science Series*’. Each ‘beyond our’ continues with *words beginning with P*:

- *1 Perspective, 2 Physical, 3 Puzzles, 4 Paradigmatic Consciousness, 5 Psychological, 6 Psi Experiences and Infinity, 7 Philosophy, 8 Proven Assumptions, 9 Present Paradigms.*

Drs. Neppe and Close are also writing for the layperson in another series of much shorter books: At this point, there are, at least, 5 such short books in process, all subtitled “*Answers That Make Sense*”. namely:

- *Solved! ; The God Matrix; Spirituality and science; Solutions to great mysteries; Turning science on its nose.*

These first editions for colleagues and laypersons will also be published through Brainvoyage.com in Seattle with a 2017 printing date.

V. (Historical) Text of an Article on the Close-Neppe Work in USA Today Magazine in 2014.

THE THEORY OF EVERYTHING HAS NINE DIMENSIONS

By Erin J Morgart

The Sparkling Diamond and the Quanta Jewel turn quantum physics and the nine-pronged world of consciousness— on its ear.

This is the title of a feature article in the Science section of the published in the USA Today Magazine ^q

Quantum Physics has expanded rapidly in 2013 thanks to the discoveries of two sets of elite scientists, working separately. ^{1,2}

Close and Neppe: The Sparkling Diamond:

In July 2013, Edward R. Close and Vernon M. Neppe announced their discovery that there are actually nine finite dimensions ^{1,3} “*Our day-to-day experience is one of experiencing our physical reality—the length, breadth and height of objects. These three dimensions of Space change with every new moment in Time. These features reflect the first four dimensions. The idea that there are nine spinning dimensions means that much of our actual reality is hidden.*” explains Dr Neppe.

The Close-Neppe mathematical derivation allowed these scientists to demonstrate the solution to some of Physics’ most remarkable mysteries¹, including elucidating the Cabibbo angle and intrinsic spin.^{1,3} The Cabibbo angle, a measure of the probability of a certain kind of particle decay, had been found to persist at a very strange angle (13.04 degrees). The reason why it was that specific size could not be explained by the Standard Model of Particle Physics, and consequently it had remained unsolved for 50 years since its discovery by Nicola Cabibbo in 1963: It could only be solved by applying the correct number of spinning dimensions

^q *USA Today Magazine January 2014 pages 66-68*; The submitted text of the original article was only minimally modified in the USA Today Magazine version and remains substantively the same. We reproduce Erin Morgart’s submission to USA Today because it maintains the headers, underlining and italics, plus the biographical data and in-text citations (which have been updated). This has also gone through minor edits from Jacqueline Slade as of August 2016. We have maintained almost all the minor editorial changes in the Magazine, like adding another header, paragraphing, and changing verb tense. The USA Today publication was in 3 columns and had two pictures. The original Morgart submitted title and subtitles were: *The Blazing Diamond and the Quantum Jewel: Two major discoveries in quick succession: The groundbreaking Close-Neppe 9D spin derivation is supported by the latest ‘Quantum Jewel’ finding. The Close-Neppe Discovery represents a major realignment of Standard Physics with the broader Reality of human experience.* © Vernon Neppe and Edward Close and Erin Morgart and permission to republish. The published article in USA Today Magazine had significant graphics. Citation: 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.

(namely 9).

As Dr Close elaborates, *“this 9-dimensional spin finding opens the door to demonstrating a radical new concept of reality: Our recent findings suggest we can now move beyond this seemingly strange and inexplicable angle of elementary particles to understand the interaction with the observer’s consciousness. That is why the 9-dimensional (9D for short) spin finding appears to be so significant.”*

The 9D derivation required a logical basis: This is provided by the ‘Neppe-Close TDVP’ (technically TDdVP)⁴ model, a proposed so-called ‘theory of everything’ (TOE) describing

- The ‘*Triad*’ of Space, Time, and Consciousness all being inseparably tied (‘tethered’) together;
- TDVP involves carefully defined ‘dimensions’ with extent and
- *Distinctions* and this includes a new mathematical technique, the Calculus of *D*istinctions.
- TDVP requires spinning movements (*Vortices*) (allowing communications).
- It reflects several major *paradigm shifts* that appear feasible mathematically, in the broader sciences (physics, consciousness, psychology, biology), and results in a philosophical model. Even prior to their latest findings, Dr Adrian Klein, the contemporary Israeli Dimensional Biopsychophysicist and Consciousness Researcher, an expert on Theories of Everything, and the pioneer of the ‘Subquantal Integration Approach’, markedly endorsed the Neppe-Close model. *“TDVP is a work that will change mankind’s future. It is a monumental work forcing obsolete preconceptions to crumble. This is a seismic shift in understanding the understanding process itself!”*

The Close-Neppe 9-dimensional derivation was postulated by TDVP; conversely, the 9D discovery confirmed that component of the TDVP hypothesis. Pertinently, this 9D spin demonstration is quite different from String Theory. Close clarifies: *“The ‘strings’ in the various String Theories generally involve the ‘curling’ or ‘folding’ into extra dimensions, and do not usually regard ‘spin’ as the major requirement for more dimensions. It’s an irony, too, that the String Theories apparently remain unproven mathematically: Some would say that’s why they are still ‘theories’. In addition, no String Theories I know of, have a total of 9 dimensions. But, perhaps most pertinent of all, String Theories do not involve any kind of consciousness, and do not generally specifically postulate Multidimensional Time, often speaking of poorly defined space-like or time-like ‘spaces’.³ By contrast, our TDVP model is based on sound logic, scientific evidence and mathematics³. It produces strong empirical evidence for more than one dimension of time, and argues for the profound need for consciousness to be included in any equation describing reality.”*

In summary, the 9 finite dimensions appear mathematically feasible, yet applying the math to any other number of dimensions, like the 10, 11 or 26 as in some String Theories, or the 4, as in our experience of our day-to-day reality, produces errors: TDVP scientifically and mathematically motivates multiple dimensions, and Close and Neppe show that there are likely 3 carefully defined *dimensions* each of Space, Time and Consciousness. For Close:

“Mathematically, the spin is the key: These rotational movements—the ‘vortices’—allow a way to move through dimensions.” These scientists had to develop new mathematical techniques to derive their information: These include the ‘Calculus of Distinctions’ (the ‘Sparkling Diamond’) and ‘Dimensional Extrapolation’³. They also, of course, relied on already well-

established conventional mathematical techniques to help in the exploration of the many ‘extra’ dimensions.

The Quantum Jewel: Arkani-Hamed and Collaborators

The second major 2013 event in Mathematical Physics occurred in September. Quanta Magazine published an article “*A Jewel at the Heart of Quantum Physics*”². The author described how physicists, Nima Arkani-Hamed, Jaroslav Trnka at the Institute for Advanced Study, along with other collaborators, discovered a new technique for applying multidimensional mathematics and pointed to the relevance of spin by incorporating ‘twistors’².

Arkani-Hamed and collaborators discovered that particle interactions may be based on a multi-faceted geometric shape, the ‘amplituhedron’. This looks like a metaphorical intricate, multifaceted ‘jewel’ in higher dimensions, so much so that these scientists could be referred to as the ‘Jewel Scientists’. Their findings significantly simplify multidimensional math, and change ideas about space and time locality and the so-called ‘unitary elements’.² Their general finding indirectly motivates the feasibility of more easily deriving multidimensional quantal particle structures, and would therefore indirectly support the earlier-announced more specific Close-Neppe discoveries¹.

Just as Close and Neppe had derived a 9-dimensional spin mathematical finding to explain elementary particles, the math of the Jewel scientists also negated the idea that all quantum physics could be conceptualized purely as properties of four-dimensional physicality: Both groups demonstrated mathematically that quantum physics simply cannot fit ‘locally’ into the geometric ‘unit’ that was previously regarded just as three dimensions of space and a moment in time. Instead, they supported the view that quantum realities can be simplified when conceptualizing new structures in higher dimensional realities, making calculations with the appropriate math much easier.

“*Our 9-dimensional spin mathematics can be regarded as very simple*”, Close explains. “*Our new mathematical techniques for describing multidimensionality begin with the fundamental application of ‘distinctions’*. *We then recognize that observational perception is relative, and that what is regarded as ‘non-local’ may be non-local only relative to the particular dimensional domains being considered.*” Neppe amplifies: “*Indeed, our finite reality consists of discrete components—these are quanta: We could think of them like the ‘pixels’ on our TV, but these are much, much, much tinier fundamental units. But these ‘pixels’ are not just contained in the 3 dimensions of space and single moment in time we actively experience all the time: They’re actually in nine dimensions—it’s just we cannot directly experience most of them. But they’re still always happening in the background.*”

We could predict that the two metaphoric findings of the ‘Jewel’ and the ‘Diamond’ may ultimately work synergistically with each other: Close and Neppe’s 9-dimensional spinning reality might be a specific applicable derivation of the mathematical applications of Arkani-Hamed and collaborators. But, even if that link were shown, in addition to the more obvious ostensible similarities such as the multidimensionality applying simplified math, there are some pivotal differences between these two momentous 2013 findings: It begins with a metaphorical ‘diamond’.

The Diamond in it all: The Calculus of Distinctions

The work of Neppe and Close could be regarded as including its own possible metaphoric jewel, a multifaceted diamond in stature, because of the fundamental quality and durability of the mathematical technique, called the Calculus of (Dimensional) Distinctions (CoD).⁵ CoD has many creative and unique facets:

- It reflects the most fundamental logical system to approach Reality.
- It allows applications across different dimensions, recognizing the distinctions between our different kinds of experiences, and how the mathematics can be applied at different dimensional levels.
- It allows conceptualizing conscious awareness, differentiating our experience at the most fundamental of levels, and ultimately realizing the relative nature of the hidden dimensional realities of existence.
- The CoD distinguishes 'variables of extent, content and impact'. These are applied to ensure that the dimensional, the substantial and the influences on events or objects are differentiated: consciousness is a critical common element in all of these.
- It recognizes the key experiential roles of subjective 'perceptions', 'conceptions' and 'interpretations': What to us is experience in everyday reality, may be quite different at, for example, the sixth and seventh dimensional domains.
- The CoD also allows for integrating the complex algebras and multidimensional geometries. This is possibly its most practical use.

We are driven to ask: *“Is the Close-Neppe Calculus of Distinctions the metaphorical Diamond of Scientific Jewels?”* Neppe answered carefully: *“Yes, it seems to be a major new discovery, ...but the full implications are still tentative. Just as Einsteinian relativity required a ‘thought experiment’ for many to understand, we’ve applied the same here by replicating our original TDVP Cabibbo angle findings of a finite 9-dimensional spinning model.”* Dr Close elaborates on this just completed derivation. *“I began with a simple Rubik's Cube to be able to mimic simple rotations. I then extended this to the CoD to demonstrate with a thought experiment that there are indeed 9 finite dimensions in quantum reality, and that (as we had postulated before) 8 of them are spinning. We appear to have 3 dimensions of Space, 3 of Time and the rest are Consciousness dimensions.”* Neppe extends the metaphor: *“If the ‘Jewel’ is a new, easier mathematical way to represent millions of calculations, then the ‘Diamond’ is the new, fundamental and basic unification that is reflected in the Calculus of Distinctions. It certainly allows for the jigsaw puzzle pieces to fit, one step at a time.”*

The missing link: Consciousness

Arkani-Hamed and their collaborators follow the giant footsteps of the remarkable pioneering early 20th century work of the great multidimensional theorists (Albert Einstein, Hermann Minkowski, Theodore Kaluza and Oskar Klein) and of the later String and Superstring theorists. But they, too, have not included something the ‘Diamond Scientists’ regard as fundamental. *“The key missing element is the involvement of a very specifically defined broader form of ‘Consciousness’ beginning at the level of the most basic quantal particles, or just possibly even subquantally, and proceeding to include a deeper understanding of the entire cosmos.”*

The role of Consciousness has largely been ignored, despite [John Stewart] Bell's Theorem and the follow up work of Aspect and others in communication at a distance, the delayed choice experiments and the split screen work, all strongly motivating this.³ *"We realize that any term pertaining to 'Consciousness' evokes controversy. And many physicists interpret all this research as not involving any 'consciousness'"*, relates Neppe. *"An independent 'consciousness' simply does not fit into a physicalistic four dimensional paradigm. But the nine dimensional spin mathematics works when we apply consciousness in the equations, and we believe that there is solid scientific support based on research."*³ *In TDVP, we've motivated for Consciousness being its own substrate along with Space and Time. Applying it, allows its seamless application across not only the Physical, but also the Biological, Psychological and, indeed, the Consciousness Sciences. Without it, we return back to a situation where even esteemed scientists, like Einstein, could not solve the multidimensionality problem. Adding consciousness fills the void."* Neppe adds.

The consciousness question

Close carefully, but still excitedly, adds to Neppe's comment: *"This change of perspective including 'consciousness' makes sense of many unexplained physical observations. Previously intractable mathematics now yields to simplified calculations that work and markedly change our view of higher dimensional existence: In this new kind of Particle Physics, a key concept that I have just discovered ([beginning] October 2013) is what we're calling the 'Triadic Rotational Units of Equivalence'(TRUE). This is allocated to elementary particles in the chemical elements of the Periodic Table, and by logical extension to molecules. We propose that this may offer a new understanding of the fundamentals of reality, and based on our preliminary findings, even, possibly, of life,"* This new research is still in process, but is a logical continuation of the 9D thought experiment. These findings are still being checked; if shown to be correct, they are extraordinarily exciting in their implications for Space, Time and Consciousness.

The dollar in the mint: The demonstration of existence

Close and Neppe's mathematical derivation of a previously incomprehensible, largely unheard of angle was new, yet this angle could be experimentally measured using complex particle colliders long before their discovery. To Neppe: *"The Cabibbo angle itself may appear to be a minor, esoteric angle, but our perfect math derivation of it proves the existence of a 9-dimensional finite spin reality. This is not based on a guess or a mathematical generalization. Instead, it's a real, now demonstrable mathematical derivation of finite reality. It demonstrates the presence of 9 dimensions, and, like a dollar demonstrates the mint, it confirms that a major hypothetical component of our TDVP 'theory of everything' model is supported. And now that our original finding has apparently been replicated by a thought experiment, we are more confident in applying new concepts like intrinsic spin and the TRUE. Indeed, it is our hope that applying a 9-dimensional spin model can open doors to many facets of Particle Physics, and, also, in understanding our perspective of the Cosmos and finite reality. That is what is so important."*

Natural imperfection: Symmetry or asymmetry in our cosmos?

The Close-Neppe partnership discovered two other remarkable theoretical findings on 9-dimensional spin. Neppe explains: *“Firstly, we always think of our world as being largely symmetrical. This may be so in the world that we directly experience—the four dimensions that we’re so familiar with. But this symmetry doesn’t apply beyond that when we calculate the higher dimensions of reality. This lack of symmetry is a mathematical one. As an example, an elementary particle, like an electron, exhibits ‘intrinsic spin’—it rotates on its own axis, but this spin does not have a perfect symmetry.”* Close adds: *“And the second remarkable finding reflects a fascinating principle: Even though there are nine finite dimensions, these miniscule particles only appear to be rotating through eight, not all nine, planes. Why? Because the first dimension serves as a reference—the rest of the rotation is relative to that first dimension.”*^{1,3}

The hidden reality: The practical direction

Whereas the Arkani-Hamed researchers may focus on more transient unstable state particles like gluons², and other Particle Physicists may concentrate on other particles which seldom exist, like the so-called ‘God particle’—the Higgs-Boson, these tiny particles may be limited to Particle Accelerators and Colliders.³ As Close puts it: *“A far more practical approach, as we have done, is to focus on elementary fermion particles that are not transient, but fundamentally maintained in stable reality existence, like the quarks and electrons in the hydrogen atom. Such an approach becomes far more central to the limited structure of reality available to our physical senses.”*

The Arkani-Hamed release seems to support the Close-Neppe 9D spin models because it emphasizes the role of the multidimensional in Particle Physics and appropriate ways to simplify mathematical concepts. But the two scientists, Vernon Neppe and Edward Close, have advanced Particle Physics, as well⁶: They have, controversially for many, motivated Consciousness as a core component of both TDVP and 9 D spin; and they have argued that Consciousness needs to be necessarily always linked to Space and Time. Their use of the CoD, Dimensional Extrapolation and other mathematical techniques, seem to have facilitated a further application of multidimensional geometry, algebra and physics; and the spinning of elementary particles apparently explains the lack of symmetry in the higher dimensions. *“There are certainly hidden realities that exist outside of our confined, limited human experience of 3 dimensions of space embedded in a single moment in time.”* Neppe concludes.

***Erin J. Morgart** is a writer, psychologist and world-ranked fitness model having won among others the United Nations USA Titles in 2012 and 2013.*

The published USA Today Magazine article did not contain the submitted references and information supplied below:

1. Close, Edward R. and Vernon M. Neppe, Mathematical and theoretical physics feasibility demonstration of the finite nine dimensional vortical model in fermions. *Dynamic International Journal of Exceptional Creative Achievement* 2013. 1301(1301): p. 1-55; and Close, E.R., Neppe, V.M. 2014, The Cabibbo mixing angle and other particle physics paradoxes solved by applying the TDVP multidimensional spin model. *IQNexus Journal* 14. 1, 13-50. See: <http://iisiq.org/iqnexus.org/Graphics/Mag/IQNJournal14/index.html#p=14>
2. Wolchover, Natalie, A Jewel at the Heart of Quantum Physics *Quanta Magazine* September 17, 2013. <https://www.simonsfoundation.org/quanta/20130917-a-jewel-at-the-heart-of-quantum-physics/>
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4. Triadic Dimensional Distinction Vortical Paradigm (TDVP). See refs 1 and 3.
5. Close ER: The Calculus of Distinctions: A Workable mathematicologic model across dimensions and consciousness. *Dynamic Journal of Exceptional Creative Achievement* 1210:1210; 2387 -2397, 2012.
6. Scientists Discover Reality Consists Of Nine Spinning Dimensions, Not Just the Four Space-Time Dimensions that we daily experience. <http://www.vernonneppe.org/media.php>

About Edward Close PhD: A skilled physicist, creative mathematician, deep-thinking cosmologist, acclaimed environmental engineer and Dimensional Biopsychophysicist. *Transcendental Physics* is one of Dr. Close's 8+ books. (www.erclosetphysics.com)

About Vernon Neppe MD, PhD, FRSSAf: An internationally peer-recognized 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, 450+ publications, 1000+ invited lectures and media interactions worldwide <http://www.vernonneppe.org/about.php>

About TDVP: The Neppe-Close TDVP 4-year collaboration utilizes the solid empirical scientific data, demonstrable mathematical logic and further conceptual innovations, as detailed in *'Reality Begins with Consciousness: A Paradigm Shift That Works'* (www.brainvoyage.com/RBC/perspective.php). The Cabibbo Angle derivation confirmed the hypothesis that a significant fundamental component of TDVP—the postulated 9 finite vortical dimensions—appears correct: See www.VernonNeppe.org/media.php

Special thanks to Erin Morgart and to Shannon Rose for facilitating this paper being reproduced here.

† As at the time of publication. The number of publications are higher now (700+).
Neppe V, Close E. Nutshell on TDVP. IQNJ 8:3, 7-79 September 2016. V10.36