

How the Neppe-Close Triadic Dimensional Vortical Paradigm (TDVP) Unifies Nature, Spirituality and Science

From : Consciousness: In modern science and philosophy conference: Second International Conference on Science and Jain Philosophy (ICSJP)

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Abstract

This paper briefly addresses the Triadic Dimensional Vortical Paradigm (TDVP) in the context of the empirical and mathematical proofs in spirituality and science. We can now apply a mathematically proven 9-dimensional quantized finite volumetric reality to everything eliminating quantum weirdness, with cosmological and life-element dilemmas being better explained. This is no longer a speculation as it is empirically demonstrated: TRUE calculations are exactly equal to the normalized LHC. This changes the whole: 4D experience becomes part of 9D finite with infinite existence. We must fit all pieces that we can do, not just 3S-1t: When we do the laws of nature appear unified and spirituality and science begin to merge. Several Tables show key data.

Keywords

3S-t; 9D; 9D+; 4D; Calculus of distinctions; Calculus of dimensional distinctions; Cabibbo angle; Close; consciousness; Consciousness research; Continuous; Dark matter; Dark energy; Dimensional Biopsychophysics; Dimensions; Discrete; Distinctions; Diophantine equations; Domains; Energy; Framework model; Framework of gimmel; Infinite continuity; Infinity; Information; Jainism; Kabbalah; Lower Dimensional Feasibility Absent Falsification; LFAP; Limitations; Mass; Mathematics; Misinterpretation; Neppe; Ordropy; Periodic table; Physics; Quantum; Relative; Relative non- locality; Restricted 3S-1t; Spencer brown; Spirituality; transfinite; Triadic dimensional distinction vortical paradigm; TDVP; Tegmark; Triadic Dimensional Distinction Vortical Paradigm; Triadic Rotational Units of Equivalence (TRUE); Volumetric; Vortices; X17 particle^c

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^c Acknowledgments: My great colleague, Dr, Edward Close, Physicist, Mathematician and Dimensional Biopsychophysicist has contributed greatly to this paper and our work: Great appreciation. ‘We’ refers to us both. Also, thank you to Dr. Leonard Horowitz who has offered to publish this work, to Dr Stanley Krippner for his remarkable mentorship, and Dr Elizabeth Raver for her insights into TDVP. I appreciate Erich VonAbele’s editorial assistance and the carefully constructed comments of Suzan Wilson.

The Standard Model of Physics (SMP): Our incorrect starting point.

Most physicists are trained in the Standard Model of Physics (SMP): This implies that these physicists account for only 3 dimensions of space in a quantum in time (3S-1t): This 4-dimensional (4D) model restricts our current conventional physical paradigm experience into three dimensions of space —length, breadth and height—in the present moment (technically, quantum) of time (3S-1t).^{1; 2; 3}

Superficially, our physical 3S-1t macro-reality appears very adequate when working simply within our current day-to-day physical experience characterized by 3S-1t. Everything is ordered and regular. *All* is complete in our touchable, tangible, consistent physical reality. But it's not quite 'all': something very important pertaining to consciousness and spirituality, other than directly applying to the brain neurologically and psychologically, is almost completely excluded. Our experience is limited to our perceptions and our responses.

We don't need to completely reject this current Standard Model of Physics (SMP)^{4 2; 5} which allows us to experience almost all of reality and appears literally so solidly based that even the most esoteric chemistry, the most basic principles of genetics, the most remarkable carbon dating, and the most consistent rules can be followed. This means we still have an empirical reality. Our macroreality of the physical appears regular and appropriate: However, it is at the quantal and the cosmological levels that unexplained conundrums and even contradictions arise.⁶ This is where 9D comes in.

However, we need to bridge the gap between this incomplete '*4D science*' (of 3S-1t) and (what Surendra Pokharna calls) '*9D science*'⁷ (which still includes the limiting 3S-1t most scientists regard as all of reality —we don't exclude what we have in physical reality). We use the term '*9-D science*' to include higher dimensions likely 3 dimensions of Space (as in 3S-1t), 3 of Time (where only 1t : the present linear time quantum is in 3S-1t)⁸ and likely 3 dimensions of Consciousness (almost all of which are in 9D but 'above' 3S-1t so in 5 to 9D domains)^{4 9; 10; 11}. 3-dimensional time is difficult to understand but comprehensible.⁸ In this instance, the 9-dimensional model was definitively demonstrated in the Neppe-Close Triadic Dimensional Vortical Paradigm (TDVP).^{12; 13; 14} Moreover, we must recognize that this 9D 'discrete finite' existence is necessarily additionally embedded in the 'infinite continuity' as a unit. This model constitutes the Neppe-Close philosophical model producing a unification of reality which we call '*Unified Monism*' (UM).^{14 15} UM is the only philosophical model deriving unambiguously from science.^{16; 17} Neppe and Close have recognized that

the laws of nature require significant additions to be unified and internally consistent. ¹⁸ This does not just require minor changes (not just being ‘fine-tuned’ from 3S-1t) as the contradictions and many unexplained phenomena in 4D become largely comprehensible only through understanding the *mathematical operations and the empirical science of 9D*. TDVP is not “speculative from our physical point of view” because it does not contradict most of physical reality, but it is cogently explained if one examines a broader reality, and then we can understand better the 50 plus unexplained conundrums in 4D reality. ^{19; 20; 21}

The 4D scientists perceive the quantal universe (quantum mechanics) (‘quantum weirdness’) as separate in laws to the *macro-universe* (regular physical 3S-1t world). These governing laws are regarded as different from the rules relating to the *cosmological* realities. These three substrates of Space, Time and Consciousness (STC) seem to be governed by their own independent laws: This 3S-1t experience reflects the *overt* part of our existence what we’re aware of while alive and awake. However, reality appears to be broader than overt human experience, and much of it involves the *covert* hidden higher finite dimensions, ultimately all embedded within the infinite. ^{19; 20; 21}

Some scientists might, nevertheless, still recognize more than sixty significant contradictions, conundrums and unexplained concepts. ¹⁹, and even understand that these laws might represent limited pieces of an incomplete jigsaw puzzle. At times, the puzzle has many new parts, sometimes unexpected as with the remarkable Besant-Leadbeater quantal-clairvoyant-remote viewing data, possibly the most fraud-proof psi data ever. ²² “It’s just how it is. It shows that nature is not inherently and consistently logical and we must simply accept that fact” is what the physical materialist 4D scientist will say. With respect, by applying TDVP we can solve or largely explain all the 60 plus difficulties. ^{12; 13; 14} Specifically, two findings from 2015-on—9D reality and gimmel—implying consciousness—are landmark. ²³ These rules might involve *fundamental single unifying Laws of Nature*.

TDVP has new applications: Our model, the *Neppe-Close Triadic Dimensional Vortical Paradigm (TDVP)* has amplified the ‘physics’ from 4 dimensions to 9D, specifically first postulating and then further demonstrating mathematically—starting with the TDVP derivation of the Cabibbo angle ^{24; 25; 26; 27}—that 9-dimensions must exist. This is a groundbreaking discovery also demonstrating TDVP. (Table 1).

Table 1: The Close-Neppe mathematical derivation that the Cabibbo mixing angle is 9-dimensional and supports TDVP. ^{24; 27}

A. Hypotheses:

Applying well-known accurately determined historical figures to ≥ 5 significant

- a. the 9-dimensional spin model will produce the 13.04 ± 0.05 degree
- b. this figure cannot be calculated using a model with any other number of dimensions.
- c. the Fermion Mixing Angle can be derived mathematically from TDVP theory, while it cannot be derived from the Standard Model of Particle Physics.

B. Literature:

Cabibbo angle Originally derived experimentally for the (13.04 ± 0.05 degrees). ^{28; 29}

Neppe and Close postulated a nine dimensional and vortical TDVP model well prior to this calculation ³⁰ November 2011 so: not post-hoc).

C. Essential calculations:

1. r_0 = the "Bohr radius" of the Hydrogen atom = 5.2917×10^{-11} meter.
2. Applying conservation of angular momentum allowed calculation of the spinning velocity of a free electron stripped from a Hydrogen atom. The velocity, $v_e = 2.9974 \times 10^8$ m/sec as a large fraction of the speed of light,
3. requires relativistic correction by of the Lorentz contraction, γ . Applying the Lorentz contraction equation formula, $l = l_0 \sqrt{1 - v^2/c^2}$, accounting for the shortening of the rotational circumference difference for each 90 degree rotation as seen from 3S-1t.
4. From N=0 to N=1, there is nothing to rotate because there are no degrees of freedom in zero dimensions. Consequently, in 9-D spin realities, there are only 8 rotations not 9.

D. Results (=Confirmation of the hypotheses)

- The contraction for each dimensional rotation is calculated to be a factor of 0.0181006 for each 90-degree rotation, or 1.629 degrees.
- Multiplied by 8 = **13.032** degrees, in agreement with experimentally derived Cabibbo angle (13.04 ± 0.05 degrees). = nine dimensional model
- Any other number of dimensions fail: When the calculations are done for other dimensional models the results do not approximate the Cabibbo angle. = far outside the range of measurement error.

E. Further Applications with conclusions

- *the pertinence of spin, the application of relativity corrections in electrons, and the conservation of angular momentum;*
- *the derivation of the same approximate Cabibbo mixing angle linked with electron spin (as well as quarks), and the broadening of Cabibbo's concept of "weak universality" ³¹ by hypothesizing that all discrete phenomena result from specific dimensional extensions of the same elementary pattern inherent in the multi-dimensional substrate of reality. ²⁴*
- *electron shape not being uniformly spherical as otherwise certain calculated velocities in our analysis would exceed the velocity of light (important, but inessential to the Cabibbo derivation.) ^{32; 33}*
- *the potential to apply higher dimensional realities for future research ³⁴;*
- *several TDVP constructs including dimensionometry ³⁴, 3S-1t reality being relative and not absolute, concepts of orthogonality at higher dimensions, the application of the calculus of distinctions, and the application of LFAF (lower dimensional feasibility, absent falsification ^{35; 36}.*
- *Equivalence for Cabibbo-like mixing angle ²⁷*

Moreover, this data is empirically demonstrated because the neutron, proton and electron mass-energy-gimmel equivalence in the Triadic Rotational Units of Equivalence (TRUE) ^{34; 37; 38; 39} as part of the TDVP model, exactly corresponds with the normalized data for the mass-energy equivalence volumetric data for these

particles in the CERN Large Hadron Collider (LHC).^{23; 34} This data shows definitively that *we exist in a 9-dimensional finite, quantized, volumetric (3-dimensional), spinning (vortical) Space-Time and Consciousness (STC) reality, furthermore, embedded in an infinite continuity (9D+)*. A key is the application of *gimmel* allowing for stable existence.

Table 2: Broader cosmological “Dark” Data (combining dark matter with dark energy) and proportionate gimmel comparisons based on cosmological abundance of elements.
Hypothesized valid if within 2% of observed value.
Volumetric Σ (Dark Matter 26.8% + Dark Energy 68.3%) ratio to cosmology 95.1% cubed = 86.01% (Planck probe 2014 data). ⁶⁴ , Gimmel to TRUE ratio (already volumetric) of Abundant Elements Σ (volumetric) Hydrogen 89.3% * gimmel/TRUE * 0.756 abundance = 67.5% + Helium + less abundant life elements with the same gimmel score = 76.2% * 24.4 = 18.59% = 86.09%.
Results: The results not only confirm hypothesis but markedly so <i>with $p < 0.001$</i> difference. The difference between proportions of Dark Matter and Dark Energy together to the ratios of cosmological gimmel = 0.08%. <div style="text-align: center;"><i>This difference is miniscule 1 in 1,250.</i></div>
<p>^cAbundance 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.</p> <p>^dThe ‘compensation’ for an absent neutron in Hydrogen reflects a critical property and may be a different kind of gimmel which we have technically called ‘daled’.</p> <p>^eHydrogen 1 is unique at : 150/168 = 89.2% gimmel to TRUE ratio. Volumetrically $108^3 = 1,259,712$. ‘Daled’ vertically \uparrow produces much more gimmel: 38 for daled instead of a neutron (0 MEUs).</p> <p>^fElem is an abbreviation for element.</p> <p>^g Gimmel: 105 for 1 electron (1 mass/energy unit MEU), 7 for 1 proton (17 MEUs), and neutrons are 16 for gimmel; 22 MEUs.</p>

Gimmel:

‘Gimmel’^{40; 41} λ is a profound newly discovered component of reality that *always existed* as a third mass-less energy-less ‘substance’ or ‘ordering agent’ or ‘process’ or ‘component’ or possibly a ‘vehicle of consciousness’.⁴² Mathematically, applying the 9D+ model definitively requires an extra third component that is massless and energyless (‘gimmel’).

The gimmel concept explains and revolutionizes science and our thinking. The key is Gimmel as the organizing constructor, the logical stabilizing pattern, the measurable union allowing equations and mathematics applied to consciousness but only with mass-energy as content and extent as different dimensions of Space-Time and Consciousness. It is the vehicle of consciousness but needs the contexts of Space-Time and Mass-Energy to be applied.^{34; 40; 41; 43; 44; 45}

Gimmel could represent the special higher ‘consciousness’ itself. Gimmel allows the ‘spiritual’ into the halls of science. **Gimmel** may be the ‘**God Matrix**’!^{41; 46; 47} However, gimmel is not quite synonymous with consciousness. Gimmel’s the *union* that needs to be in connection with the *contents* of mass/energy/

consciousness, representing the measurable *extent* of space/time/consciousness and also the impact and influence that link with prayer interaction—certainly the *organizing connection* may be the key term.

Effectively, gimmel turns out to be the major, indispensable agent for our physical reality. *Gimmel unifies the laws of nature as it's in union with every **stable** particle in the universe.* Gimmel is even proven in Dark Matter and Dark Energy correlations^{48; 49} (Table 2 above), and is necessarily in union quantally with every stable subatomic particle. *Without gimmel, our physical world and our universe would simply not exist— every particle would fly away.* Gimmel makes for stability with the exact amounts of Gimmel TRUE units in quarks and electrons.^{38; 39; 50; 51; 52}

TABLE 3 Demonstration that Atomic Materialism is mathematically refuted:

Without any third component like gimmel, all calculations produce inequalities when integers are needed when calculating the cubes of these combined particles: three examples.

The first demonstration: the numbers of quantum units added together don't make a stable atom. (relates to atomic number) Life element yield $a^3 + a^3 + a^3 = 3a^3$ in atomic number volumetric equivalents: **Cube root of $3a^3 = 1.442n$ (non-integer).** This is the first demonstration mathematically that reality cannot be purely materialistic without using a third component (If life elements are not integral then atomic materialism is refuted and the other elements are also not integral).

The second demonstration: mass and mass energy of particles: Atomic mass of elementary particles.

Volumetric equivalence units as found in Collider data (LHC).^{23; 34} : Electron 1 Neutron = 1839, 1 Proton = 1836. For stable atoms, $a^3 + (ap)^3 + (an)^3 = X$ Dividing out the 'a' (atomic number) we have $1+p^3 + n^3 = (X/a^3)$, where X/a represents the mass of the atom. The resultant cube root is 2315.13843... \neq integer and therefore \neq solution of the Diophantine equation of *sum of cubes*.

The third demonstration: applying TRUE and spinning particles. This is more complex but definitive.

Electrons, protons and neutrons are rapidly spinning elementary particles because of quantum and relativistic limitations they have to be multiples of TRUE units. TRUE 'volumetric equivalence' = sum elementary particles (quarks, electrons). Normalizing the mass/energy of up-quarks and down-quarks to the mass of the electron, and calculating mass/energy volumetric equivalence for the proton and neutron shows that the proton is 17 times the electron and the neutron is 22; the *volumetric equivalents* of the particles must add up to a cube

Without gimmel, the Diophantine equation would then be of the form $(n*1)^3 + (n*17)^3 + (n*22)^3 = Z^3$. But Z is a non-integer because $Z^3 = 15,562n^3$ and 15,562 is not a cube; therefore: we cannot have integers.

We cannot have half an atom, or a fraction of an electron. Remarkably, gimmel is not a speculation, it is mathematically and empirically proven.⁶ This allows everything in our world and, indeed, in our cosmos, to have the same rules: Our universe, or even multiverse, must contain protons and electrons, and with the exception of common hydrogen ('Protium'), neutrons (and Protium instead is loaded full of 'gimmel' we argue). All these subatomic particles must be in union with gimmel, otherwise they are mathematically impossible as they're not integers, and physically unstable.⁵³ This literally makes materialism as we know it, refuted: Even without knowing about gimmel mathematically, the atom with its protons,

neutrons and electrons, would simply not fit. (Table 3: Refuted Atomic Materialism).

Gimmel specifically requires applying the 9-dimensional model based on necessary mathematical calculations not only at the quantal level (where there is no longer ‘quantum weirdness’), but at the macroscale level with more gimmel in the life elements (which, additionally, are consistently all cubic multiples of 108 cubed given everything in reality is volumetric). Surprisingly, but for good reason as it is involved in many reactions, phosphorus is not an element of life. ⁵⁴

Table 4: Some Elements (including elements) And Compounds Including Gap In TRUE Unit Analysis showing Gimmel scores ⁴⁰ (Asymmetric ≠ a cube root integer). TRUE volume lists just the incompleteness of non-integers.

Compound	λ Units	Total TRUE	Units λ %	TRUE Volume	Comments and Abundance rank# ^{55; 56; 57}
Hydrogen ^{58; 59}	150	168	89.3%	(1x108) ³	Critical Element
Deuterium	128	168	76%	108 ³	Isotope; rare
Helium	256	336	76.2%	(2x108) ³	Inert Elem ^{6,7} #2
Lithium	384	526	73.0%	...327.2	Asymmetric #44
Beryllium	528	710	74.4%	...89.437	Asymmetric #44
Boron	656	878	74.7%	...545.64	Asymmetric #61
Carbon	768	1008	76.2%	(6x108) ³	Organic element #4
Nitrogen	896	1176	76.2%	(7x108) ³	Life element #7
Oxygen	1024	1344	76.2%	(8x108) ³	Life element #3
Fluorine	1,168	1,550	4% .75	...22.977	Asymmetric #23
Neon	1280	1680	76.2%	(10x108) ³	Inert element #5
H ₂ O (Water)	1,324	1,680	78.8%	(10x108) ³	Water
Sodium	1,424	1,886	5% .75	...1,193.12	Asymmetric #13
Magnesium	1536	2016	76.2%	(12 x108) ³	Life element #9
Aluminium	1,680	2,222	6% .75	06.1,409	Asymmetric #12
Silicon	1792	2352	76.2%	(14x108) ³	Life element? #8
Phosphorus	1,936	2,558	75.7%	...1625.008	Asymmetric #16
Sulfur	2,048	2,688	76.2%	(16x108) ³	Life element #10
Chlorine	2,192	2,894	75.6%	...1840.97	Asymmetric #23
Potassium	2448	3,230	75.8%	...2056.944	Asymmetric # 22
Calcium	2560	3360	76.2%	(20x108) ³	Life element #12
Iron	3,392	4,520	75.0%	...6096.39	Asymmetric #6

Gimmel is critical cosmologically as well where the proportions of Dark Matter and Dark Energy correlate overwhelmingly. ^{48; 49} (Per Table 2)

The extra force that could be 9D+

Moreover, these 9-dimensional plus factors together with Triadic Rotational Units of Equivalence (TRUE) and gimmel, allow numerous solutions that couldn't otherwise be solved^{60; 61; 62}. For example, importantly, applying the simple mathematics of TRUE, we can demonstrate why gluons⁴¹, while adequate in 4D, are impossible applying 9D²³ (Table 5: Gluons)

Table 5: Gluons are impossible. Applying gluons and gimmel to volumetric calculations on the atom of life elements.^{41 e}

Substance	Cube	Cube root	Integer?
Gluons	68,697y ³	40.995338y	No
Gimmel	125,971,200y ³	108y	Yes!

(y reflects the Atomic Number reflecting number of neutron subatomic particles. Gluons result in an inequality as the gluons are not linked with electrons. In contrast neutrons produce a stable quantity in Minimal Rotational Equivalent Volumes for life-elements [as in Table 6B] when applying gimmel but not gluons as gimmel is in union also with electrons, not just nucleons.)

TDVP unifies nature because the same laws apply across the quantum, macro-world and cosmological reality. Our 4D experience is simply the limited but important physical component of 9D+ existence. Explaining these within the SMP 4D fabric led to hypothesizing a 'fifth force', most recently the hypothetical 'X17 particle'.⁶³ We propose this hypothetical X17 may better be explained by a 9-dimensional model (9D) with gimmel.²³

In the SMP, significant limitations with some apparent quantum contradictions (sixty unsolved 4D problems)^{12; 13; 14} show reductionist materialism cannot solve these major questions.^{19; 20; 21} Yet, these appear soluble through 9D+ science by applying 9D+ science using TDVP as the model.⁴⁴ (Per Table 3: refuting atomic materialism.)

The SMP needs to be extended and expanded across further dimensions and recognize consciousness and the infinite continuity. Neppe and Close have called this broader discipline 'Dimensional Biopsychophysics' (DBP). Therefore, we necessarily apply some terminology that is new and possibly unfamiliar to the

^d These key life elements spell out CHOSeN.

^e Tables 2-6 in this article are directly derived or adapted from Neppe VM, Close ER: The Neppe-Close triadic dimensional vortical paradigm: An invited summary. International Journal of Physics Research and Applications 3: 1; 001-014, 2020. <http://www.pni.org/groundbreaking/Physics-TDVP-Neppe-Close-ijpra-aid1018-200120.pdf>. We hold the copyright but acknowledge the work of the Intl. J of Physics Research and Applications.

reader, just as we need to when learning other new sciences.

This is in the context of approaching dimensions, infinity, understanding spirituality, consciousness, meaning, math, and the laws of nature.

This is a broader systems approach.^{18; 64; 65} This is important because most physicists today are ill-equipped to comment until they have studied DBP. DBP extends physics, consciousness, the infinite, and the biopsychosocial to extra dimensions and applies mathematics empirically. Like Max Tegmark^{66; 67} and the ancients like Pythagoras^{68; 69} and Plato^{70; 71; 72}, we recognize the key role of mathematics as fundamental in nature, not just for application in mathematical operations.

Furthermore, we recognize that we must make our laws of nature work together as one. We think we have done this in Dimensional Biopsychophysics by applying our Nepe-Clouse Triadic Dimensional (Distinction) Vortical Paradigm (TDdVP also called the TDVP).⁷³ Reality becomes unified.²³

For more than a century, Physicists and other scientists have attempted without success to develop a ‘theory of everything’.^{74; 75; 76} TDVP —our metaparadigm^{77; 78}— is sometimes called a ‘Theory of Everything’ (TOE). It represents nine-dimensional (three squared) quantized finite existence involving vortical rotational movement across this finite 9D; this is embedded in an infinite continuity with likely Higher Consciousness— Spirituality. Biologists have recognized life but often ignored the quantal and cosmological. Still other researchers have focused mainly on the elements that are involved in terms of inorganic and organic chemistry. Then there are those who have purely studied consciousness without evaluating these other areas. These have all reflected mysteries that have befuddled even Einstein^{69; 79; 80}, who supposedly spent much of the last 20 years of his life, trying to find a theory that integrated all known forces.

In my humble opinion, science is incomplete without the spiritual, and the spiritual is incomplete without the science. They are not like Gould’s two separate magisteria.^{81; 82} In another sense, the science might reflect the convergent logic, the empiricism and the mathematical proof. The spirituality incorporates the art. Science without art is incomplete; art without science is unfinished.

TDVP fundamentals

TDVP is unique in that it involves a scientific model^{14; 83}:

- with higher consciousness and spirituality;⁸⁴
- with multidimensional reality: This existence is proven now^{24; 25; 26; 27} to be only 9 finite dimensions^{85; 86; 87; 88};
- with extended consciousness;

- enveloped by a continuous infinite reality ^{14; 89; 90; 91} different from the limited discrete, pixilated, quantized existence we're used to in our physical world;
- gimmel and Triadic Rotational Units of Equivalence (TRUE) ^{6; 40; 41; 42; 49; 62; 92}. This is not just an imaginary concept but demonstrated as necessary because it even correlates with the Large Hadron Collider data! ^{93; 94; 95}

Through TDVP we understand many triadic fundamental components:

- Our existence is triadic—in threes: Up-quarks (2 in protons, 1 in neutrons), down-quarks (1 in protons; 2 in neutrons);
- Our world is necessarily only volumetric with three dimensions: singularity points, lines, and planes are not by themselves part of empirical reality; vortical movement spin is orthogonal across three dimensions eventually being in 3 squared (= 9) dimensions. Table 6A describes fundamental TRUE elementary particles.

Table 6A: Tabulated elementary particles including gimmel and TRUE scores. ⁵⁰

Elementary Particle	Particle	Mass/energy	Gimmel	Total TRUE Units	Combined Particle
e	electron	1	105	106	Electron = 106
u1	proton	4	2	6	
u2	proton	4	4	8	
d1	proton	9	1	10	Proton = 24
u3	neutron	4	5	9	
d2	neutron	9	3	12	
d3	neutron	9	8	17	Neutron = 38

There is mathematical and physics proof of our data exactly equal to the Mass-energy equivalence normalized data in the CERN Large Hadron Collider (LHC). ^{93; 94; 95}

Our data also correlates very strongly (in in 1250 level) with dark matter and dark energy. ^{48; 49} (See Table 2 Dark ^{48 49}) We further apply terms such as ‘9D plus science’ to incorporate the interface of 9D science with the infinite. ^{91; 96}

The 9D and 9D+ science model is a functioning and unrefuted major paradigm shift. ⁹⁷ Moreover, 9D incorporates our current physical 3S-1t 4D science, and is mathematically proven, and also empirically demonstrated. ⁹⁷

Extending our world with the spiritual.

‘Spirituality’ is critical here, with gimmel and consciousness, but ‘Spirituality’ is difficult to define: Many would consider it as synonymous with such terms as the ‘transcendent, nonmaterial, higher level beliefs, and mystical’: In common use, it might imply some kind of ‘belief in a higher good, stripped of ritual’, and a higher-level deity, but not defined synonymously with ‘religion’ with specific belief

systems.^{9; 10; 16; 84; 92; 98; 99} Some would label spirituality as one aspect of the ‘non-physical’: That non-physicality might be so, provided that we remember that the spiritual can covertly, but regularly *impact and influence* all of our overtly expressed physical reality.⁸⁴ This bidirectional impact and intent is fundamental to TDVP and more than just a physical filter in the brain as proposed by Henri Bergson.^{100; 101}

The ‘spiritual’ has not been scientifically recognized because scientists need to apply the (TDVP) concepts of multidimensionality, consciousness, infinity, scientific feasibility, and the transcendent. To make spirituality a science, we would need to apply the scientific method including feasibility, because falsifiability would be rare—again LFAF.¹⁰² We would have to move away from belief to empirical fact and mathematics. This is a formidable challenge, but TDVP, gimmel, 9-dimensional models, allowing for a science of consciousness, and recognizing the math in infinity, helps a great deal.”⁸⁴

Moreover, this important differentiation of proof and speculation can be more easily made through our new technique in the Philosophy of Science, namely the Neppe-Close concept of Lower Dimensional Feasibility Absent Falsification (LFAF).^{35; 102; 103; 104} LFAF changes the perspective and allows us to conceptualize these differences. We can incorporate previously ignored complex concepts like higher consciousness, hidden dimensions, and how the infinite, without us being aware of it, impacts us physically. The LFAF technique, extends the model of reality as it now recognizes the feasibility of applying 9D. 9D+ includes Consciousness and spirituality, because LFAF also differentiates different levels of proof, allowing for feasibility. Here is a historically pertinent example: In 2011, Neppe and Close postulated feasible logic in the First Edition of their book, *Reality Begins with Consciousness: A Paradigm Shift that Works*³⁰. At that point in time (2011- 2012)^{105 83}, the pieces fitted logically together like incomplete jigsaw puzzle pieces, as Neppe and Close were applying their newly enumerated Philosophy of Science LFAF principles^{35; 36; 102; 104} However, the math was then demonstrated^{35; 36; 102; 104} proving the many missing pieces of the puzzle and then the empirical data.^{26; 106; 107; 108; 109} And between, we definitively showed that *atomic materialism is refuted: It’s mathematically impossible!*¹¹⁰ Furthermore, our data correlates empirically not only in the macroreality, but in quantum physics and cosmologically. TDVP involves several new mathematical applications and extensions of previous theorems. This has been required to evaluate and support multidimensional realities in quantum physics, as well, as for broader speculative ideas pertaining to the fundamental nature of reality. The implications of these findings are critically important.

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These solutions are simpler because, historically, we have markedly adapted George Spencer-Brown's 'Laws of Form' ¹¹¹ to applying a new method of mathematical calculation, Edward Close's 'Calculus of Distinctions' (COD) ^{34; 112; 113; 114; 115; 116} which recognizes quantal limits and that the nature of finite reality is quantized and volumetric. ²³ The COD includes distinguishing between content, extent, and impact. ^{115; 117} These are the fundamental distinctions of Essence in TDVP. ^{114; 117}

A new landscape: Clarifying the essence distinctions: Extent, content, impact.

Let's examine the several fundamental components of TDVP. ^{118; 119} This changes the landscape from 4D to 9D+. ¹⁴ First, the concept of dimensions by definition involves measures of *extent*. Mathematically, there turned out to be 9 specific dimensions, which prior to the proof, we had hypothesized. This is not speculative: Extent reflects the measure, such as space and time in physics, and space, time, and gimmel-consciousness in Dimensional Biopsychophysics.

1. We need something to measure and fundamental to our physical universe are mass and energy. This allows the idea of '*content*'. Content reflects substance, such as mass and energy: these are the empirical features that are fundamental to our physical universe. We can express content mathematically relative to *extent* only indirectly, for example, as famously in Einstein's $e = mc^2$ ^{80; 120; 121}. In this equation, matter and energy are shown to be inherently equivalent, and therefore mass can be converted to energy, and their ratio is proportional to the speed of light squared, relating both to measurements of space and time.
2. *We propose that $e = mc^2$ is insufficient. This is not a 4D but 9D finite reality. We must take into account consciousness and we must recognize 9D+. This requires amplifying.*
3. Impact and influence is the third essence distinction besides content and extent. This gives a control and mechanism to mass and energy allowing extent and content to be impacted, e.g. as in earthquakes. But this could also be through prayer ^{122; 123; 124} and meditation. ^{125; 126; 127 128}

Consciousness and gimmel

We now add a major component namely **consciousness** into these three—consciousness extent, consciousness content, and consciousness impact and suddenly we have dimensional comparisons of consciousness essence as part of the Calculus of Distinctions. ^{113; 115; 129} This may be the most important advance of all, particularly after our discovery of gimmel, the third massless, energyless component of subatomic process. We've been referring here to 'gimmel-consciousness' as the most likely, and almost only explanation. ^{34; 130; 131}

- Consciousness has many different ways of being conceptualized.^{31; 128; 129} Our specific application of Consciousness in this context, constitutes the ‘unification of information, knowledge and wisdom at the infinite continuity level’. This infinite consciousness could partly be expressed in the finite quanta as the equivalent targeted, directed, quantized components of ‘meaning’. We humans utilize that meaning as the endpoint expression of our idiosyncratic awareness’s in our brain. We do not, therefore, just apply the term ‘information’ as a synonym for ‘Consciousness’. We’re conceptualizing something broader than information
- The Triadic Dimensional Vortical Paradigm has a fundamental math and empirical principle namely, volume: Dimensions of content are never points.

The infinite continuity and transfinite in TDVP:

Certain important assumptions apply to TDVP:

- The infinite consciousness is an unending repository of information.^{14; 78; 90; 91; 96}
- The pixilated finite volumetric reality also has a higher quantized level than the 9D finite spin: This is the transfinite reality—a countable infinity¹³² that can also be regarded as the higher ‘tenth plus dimension’. We call this finite and transfinite together the ‘metafinite’¹¹⁹—the quantized integrated reality. There has to be a 10th plus dimension as there is always an N+1 dimension to N dimensions¹⁰⁷.
- In turn, these quantized, pixilated, metafinite volumetric components of reality are necessarily embedded in a continuous infinite reality: The infinite pervades all of the finite necessarily.^{89; 90; 91; 96}
- This information is expressed in the metafinite (= finite + transfinite) to sentient beings as meaningful information. We call that ‘*content consciousness*’ (C_C). Like with the extent of STC, there is a triad of content namely *mass- energy-C_C*. (MEC_C). Everything that exists, whether living or inanimate, even atoms, consists of MEC_C. These must be stable to maintain itself in our empirical real world.^{40; 83; 133; 134; 135; 136}
- This unification of the finite and the infinite, and of STC and MEC_C necessarily results in the new Neppe-Close philosophical model called ‘Unified Monism’ (UM).^{16; 17} UM is expressed spiritually through the science of TDVP.
- Gimmel is likely the consciousness expression but involving union with MEC.

Speculations about TDVP:

We still have areas to speculate about. This is still based on some cogent data, but constitutes an incomplete jigsaw puzzle:

1. We have proposed, but not yet definitively proven, that there are 9 *rotating vortical* dimensions in the finite reality. If this is so, it provides a model for

unifying the fundamental forces of physics, and revises separate concepts ⁹⁵ such as the strong and weak forces, gravitation and likely electromagnetism. ^{6, 93; 94}: *We appear close to solving the Unified Theories but must link all of these with 9D+ vortices.*

2. The Consciousness dimensions in TDVP are measured ordinally in extent, but contain content which cannot be directly measured without understanding the necessary dimensional extension. ⁸⁴

The spiritual traditions and TDVP

1. The three consciousness dimensions correspond with higher integrated qualities. Legitimately, we could perceive *spirituality as a reality*. ⁹⁸ These are well-defined in the Sephirot in Kabbalic mysticism ^{22; 84; 99; 137; 138; 139}, or equivalents in Vedantic thought ¹⁴⁰, and Jain philosophy ¹²⁸ and Atma ¹²⁸ and even their ostensible linkages with TDVP ^{7; 141 84; 99; 139 9},

2. Here is something remarkable from the bible: ^{98; 99}

The beginning of finite time: Was gimmel always present? ⁹

Logically, for stability, gimmel had to be *the first of all the components of finite reality that were present. Gimmel preceded mass and energy and therefore preceded the finite existence of the Big Bang or other 'Event Horizon'*. ⁷

Biblically, in Genesis 1:2, there is the Hebrew phrase *tohu u'voahu*. This sometimes is translated as a 'formless and nothingness'. These two terms do not exist elsewhere in the Bible, or in regular Hebrew, and appear to have been mistranslated into the English. Based on detailed study, including commentaries, we strongly argue that 'voahu' is actually gimmel. This *voahu* is linked up with the *tohu*, which is why they might appear together. We propose that 'tohu' is the precursor of what would later be the formed mass and energy: At that point in time, before the Big Bang equivalent, *tohu* was just that formless component that needed gimmel (as 'voahu') to become mass and energy, as we know it: We have proposed that TDVP ⁷, with conservation of gimmel and TRUE as a recent axiom, and with ordropy ⁷ and the infinite ⁷, implies that the existence of the cosmos was never a 'nothingness'. It was never 'something (such as the Big Bang and our universe) 'out of nothing'. *It was always something infinite before. We know that 'gimmel' fills this requirement as a foundation of our studies. We further base our opinion on the whole context of Genesis Chapter 1: 1-4. This is an illustration of how spirituality can directly support science.*

So, to answer the question: *Yes, gimmel was always present in the finite and even before that*, otherwise the second law of thermodynamics would have

precluded the formation of any stable structure. It also manifests itself in the infinite continuity. The finite began with the Big Bang or equivalent Event Horizon, and therefore already had ‘gimmel’ (which is the Biblical term ‘*vohu*’). And our intuitive title for our book, *Reality Begins with Consciousness*⁷, appears to be correct. That beginning is *in the finite level of existence; the infinite continuity is without beginning and without end.*

TDVP Summary Perspective:

- Reality appears to be far more complex than what we as sentient beings experience in the limited aspects of 3S-1t that we directly perceive.^{6; 93; 95; 142}
- Finite reality involves specifically a 9-dimensional (9D) spin reality. This mathematical derivation based on ‘particle physics’ was not surprising because we had postulated this would be so based on the TDVP model³⁰. This is how we extended the SMP beyond 3S-1t to a 9D model^{85; 86; 87; 88}.
- An axiom of TDVP is that reality consists of a triad of substrates Space, Time and the Extent of Consciousness (C_e) (STC). STC_e is always tethered together so that not only is there necessarily ‘Space-Time’ but ‘Space-Time-Consciousness’ Extent. Essentially, we must recognize that Consciousness and Spirituality are not single concepts. They each have extent linked by tethering with Space and Time. And we cannot have extent without content where Mass, Energy and Consciousness content are in union together.^{40; 45; 133; 136; 143} That C_c is effectively gimmel.^{6; 114; 117} All of extent and content are impacted, including potentially by a divinity and that influence constitutes bidirectional (prayer).^{9; 10; 98} Impact, content and extent (ICE) are fundamental *Essence Distinctions*.^{14 9; 10; 98} to the mathematical Close Calculus of Distinctions.¹¹⁵

The 9-D TDVP model clarifies many theories. Possibly the most overt extra component was applied by Nobelist Gell- Mann, who described ‘gluons’^{144; 145}. These ‘gluons’ fit within 3S-1t, implying some extra volume and ‘gluing’ together of the protons and neutrons components so they don’t fly away. The problem is, applying the geometry of multi- dimensional volume, gluons are asymmetrical and unstable, despite the fact that they were (and are) proposed to act just like a ‘glue’ holding together the nucleus of the atom. They have no other purpose. This is an example of a math impossibility in 9-D physics and Dimensional Biopsychophysics. (Per Table 5). They cannot be explained in 9-dimensions and mathematically, gluons are impossible: They contradict Fermat’s Last Theorem (FLT)^{146; 147; 148}. This is because they simply deal with neutrons (protons and

neutrons). There are no electrons making up a third aspect which make their 9D existence impossible. ⁴¹

Life elements

Hydrogen is far the most abundant element in the cosmos but manifests a unique property: It is likely that great amounts of gimmel are mainly reflected in Hydrogen's absence of a neutron.

We list the first 20 elements in Table 4, plus iron, which is not a life element but apparently contains the most gimmel because of its size. We also show that there are 'GAPS' in this analysis. This data is not only just mathematical, but empirical.

There are the life elements (C, H, O, S, N plus Ca and Mg and likely Silicon) and two inert noble elements (He and Ne) where applying the Gimmel scores to Triadic Rotational Units of Equivalence (TRUE) calculations, these are all cubic multiples of 108 cubed in score.

The fundamental components of TDVP for scientists:

Neppe and Close proposed the 'Triadic Dimensional-Distinction Vortical Paradigm' (TDVP) in 2011. ⁸³ Since then, the underlying hypotheses and axioms ^{30; 105} have not changed, but the mathematics has demonstrated the consistency of the model ^{26; 27; 106; 107; 108; 109}, even to the Laws of Nature being unified ^{18; 106}.

o The most fundamental measure in the laws of nature is volume. Everything is volumetric, and therefore linear dimensions must be cubed. This allows for mathematical calculations that are based on volumetric realities and can be empirically solved (such as the LHC cosmological and life elements data.

- Everything is quantized. The quantum reflects a limit of minimal quantity. This means that infinitesimal calculus ¹⁴⁹, while valuable of itself, is theoretical, and we've therefore had to develop the new calculus of distinctions ^{37; 129; 150; 151}.
- Our current Standard Model of Physics is mathematical impossible. Atomic materialism is refuted: volumetrically, it is an inequality ^{110; 152}. It's astonishing that this basic calculation has never been pointed out before Neppe and Close in 2014. There has to be an extra component for such cubic combinations to work mathematically. This introduces integral variables those Diophantine Equations and volumetric solutions necessitate gimmel applying a subset, namely Close's 'Conveyance Equation' ^{39; 153}

- The TDVP concept of Infinite continuity requires Gödel’s Incompleteness Theorem (GIT) ^{154; 155}. No consistent logical theory can be complete within itself which is why we need to go outside the box from the integral finite to the infinite continuity. GIT necessarily requires something entirely different and outside the consistent logic of the discrete, quantized, finite, volumetric, 3S-1t reality alone. GIT is fundamental to TDVP ‘Infinite Continuity’ as the over-arching Infinite Continuity allows not only an approach ‘outside the box’ but fundamentally different as it’s infinite and continuous not discrete quantized. ^{30; 118; 119}
- However, even if infinite continuity did not exist, the rest of TDVP with the 9D and gimmel still would be applicable. But like all other models that apply just the finite reality, it would not be a complete TOE^{74; 75; 76}.
- Infinite continuity cannot be directly demonstrated, but is required for any Theory of Everything as otherwise the math model would be necessarily incomplete. The infinite continuity allows for further disciplines like ‘ordropy’²³, enduring multidimensional infinite order ^{78; 89; 96; 156; 157} (in addition to the entropy of physics with the tendency towards disorder, despite us living with great order in our 3S-1t sentient existence) conservation of gimmel in the infinite continuity ^{34; 158}, explanations of infinite existence, and of meaningful evolution^{159; 160}. Incorporating gimmel also into the infinite continuity component ^{89; 135; 156} of the TDVP 9-D model provides a single explanation, leading to the Laws of Nature being unified ^{18; 106; 161} and a consequent philosophical model of Unified Monism being proposed ¹⁷, based on the science.
- Triadic Rotational Units of Equivalence (TRUE) in TDVP are fundamental measures of volumetric equivalents including mass, energy and gimmel. ^{39; 50; 51} TRUE can be applied to analyzing quantum phenomena, to life elements and other compounds in our macro-world, to dark matter and energy, and through the inclusion of gimmel even applied to the infinite continuity. TRUE analyses ^{34; 37; 150}, inter alia, demonstrates TDVP to be mathematically and empirically real ²³. Most definitively, when examining normalized data from the gimmel TRUE unit Mass-energy equivalence scores (GTUs) and comparing these with the CERN Large Hadron Collider, they both are exactly equal integrally with the normalized electron score as 1, and the proton as 1836 and the neutron as 1839. This proves this component of our Triadic Dimensional Vortical Paradigm data is correct empirically ^{34; 60}.
- Next, we have to use the mathematics that are cubic, volumetric, and quantal applying the ‘Calculus of Dimensional Distinctions’ (CoDD) ^{115; 117}. The CoDD ensures geometric symmetries which can be applied to the Periodic Table of the Elements. (Table 6B). It can be applied to protons, neutrons,

and electrons in the atom in all the elements (except Hydrogen).⁶¹ We discover that the elements of life (C, H, O, S, N, Ca, Mg, and likely Si; and also He, and Ne as inert elements) are all multiples of 108^3 TRUE, and these are also necessarily stable and symmetrical around an orthogonal axis. These ‘life elements’ are in union with more gimmel than any other elements.⁶¹ Moreover, *Water is the most life-sustaining chemical in the universe, and has more gimmel than any other compounds.*

Table 6B: Tabulation of nepton^b subatomic particles, gimmel, TRUE and MREV scores for the life elements⁵⁰. Amplification of Table 6A.

Particle	Mass/Energy	λ Gimmel	Total TRUE Units	MREV (minimal rotational equivalent volumes)
Electrons (e)	1	105	106	11,91,016
Protons (P ⁺)	17	7	24	13,824
Neutrons (N ⁰)	22	6	38	54,872
Totals	40	128	168	108^3

B Neptons: Composite term for Neutrons, Electrons and Protons, as components of the atom. The term ‘neptons’ was introduced by Nepe and Close in 2015.⁵⁰ This is an example using 1 nepton each, so theoretically is Deuterium (Hydrogen-2)

Finally, and of life-sustaining relevance, is Hydrogen ${}_1\text{H}^1$ (Protium), the most abundant element cosmologically, and unique because of the absence of the neutron. This makes ${}_1\text{H}^1$ a critically important exception in nature. We have postulated that the Hydrogen ${}_1\text{H}^1$ atom contains an extra quantity of ‘gimmel’ instead of its missing neutron. This results in a far greater quantity of ‘gimmel equivalent units’ than any other element. We call this neutron-linked extra massless, energyless substance ‘daled’ (likely a variant of gimmel)^{58; 59}. This would be the absent-neutron equivalent ‘gimmel’ that is in union with, for example, the proton of Hydrogen (which contains two up-quarks and one down-quark).

Perspective

So where do we go? *We know that our current scientific model has failed, that this failure requires developing a new model.* It doesn't mean to say we're giving up our physical reality. We're not at all; it's just a component of it all. TDVP requires using an extension of scientific thinking.

We can approach everything in an ethicospirituobiopsychofamiliosocioethnicocultural way.⁷ This is a big word but we can extend it through 32 other systems.¹¹⁹ This is a *horizontal Systems Theory*

approach¹⁶², just like the *vertical Systems*.^{30,163} But the most important thing is that we can extend this spiritually. Jainism fits this, and so does Kabbalah, as examples.

TDVP appears to be special, appears to work, appears not only to be scientific but philosophical, and it appears to unify reality. It integrates science and spirituality. So here is the question: Is this the first revolutionary moment of the 21st century? Here we have our hidden dimensions, and as we go higher and higher, we have our consciousness and our restricted experience and how, when we go to the highest kind of level, space and time are integrated, are tethered, are contained in consciousness in terms of those higher dimensions. And this doesn't stop after death or before life, so to say, in terms of survival.

The mathematics is axioms, theorems, and lemmas – and particularly the calculus of dimensional distinctions, which makes it very easy. There are 600 different hypotheses we proposed in our book *Reality Begins with Consciousness*⁸⁹. It's fascinating and yet I don't know of any scientist who has done a PhD on this. By contrast, there are 1,000 active string theorists looking at string theory or related areas like superstrings, and M-theory, as part of the extension of dimensions.^{164; 165; 166} The various 'strings' all remain theories and they've never been proven.⁷⁵ They ignore consciousness and also vortical rotations with foldings or equivalent instead. Remarkably, in TDVP, we have a model that is proven, that we published 10 years ago, that has never been refuted, and we've published hundreds of articles on this validating this and demonstrated it mathematically and empirically. Yet, nobody seems to be too interested, except for a few people. Respectfully, what will it take?^{167, 168, 169, 170}

As Arthur Koestler mentioned “innovation is a two-fold threat to academic mediocrities— it endangers their oracular authority, and it threatens that their carefully-built edifice might suddenly collapse”¹⁶⁷ Max Planck, the great Nobel physicist, spoke about major scientific advances going from “funeral to funeral”¹⁶⁸ because people are taught certain things and they say “this must be wrong”. And then we have the different stages of change -- Thomas Kuhn's revolutions¹⁶⁹, and we extended this, Neppe and Close, to 11 different stages.¹⁷⁰

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