Gravity is Not Quantum Mechanical But Rather Vector Mechanical, Operating at a Fundamental Scale Smaller Than Quantum Mechanics. Also, The Foundation of Our Universe is Uncertainty, Not Spacetime.

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This is a put-your-best-foot-forward sort of arrangement. What you see immediately below is the evidence I discovered only at the very end of my studies. It is an extremely high correlation between the way in which stable, subatomic particles express their magnetic moment in relation to their spin (*g-factor*,) and the fractional division properties of specific b=2 (*i.e.*, binary) prime numbers (*see*, Midy's Theorem.)
Outside of the uncertainty-based cosmological model discussed below, this sort of thing (a direct correlation between math and physics) should be very impossible. So, depending on perspective (yours or mine,) the below graphic is either completely unbelievable yet verifiably factual and accurate (*i.e.*, true,) or is just kinda obvious. Anyway, here is a crack in your reality… enjoy.

Why and how does the below correlation exist?

CODATA recommended *g*-factor values:

Particle	Symbol	*g*-factor	Relative standard uncertainty
proton	g_p	+5.5856946893(16)	2.9×10^{-10}
electron	g_e	−2.00231930436092(36)	1.8×10^{-13}
neutron	g_n	−3.826085 52(90)	2.4×10^{-7}

(Source: https://en.wikipedia.org/wiki/G-factor_(physics))
(Source: https://physics.nist.gov/cgi-bin/cuu/Results?search_for=g+factor)

Repeating Decimals of certain *b*=2 Prime Numbers with 9's Property per Midy's Theorem:

7: (6-digit): 8, 5, 7, 1, 4, 2.

23: (22-digit): 8, 2, 6, 0, 8, 6, 9, 5, 6, 5, 2, 1, 7, 3, 9, 1, 3, 0, 4, 3, 4, 7.

431: (2x 215-digit): 0, 0, 2, 3, 2, 0, 1, 8, 5, 6, 1, 4, 8, 4, 9, 1, 8, 7, 9, 3, 5, 0, 3, 4, 8, 0, 2, 7, 8, 4, 2, 2, 2, 7, 3, 7, 8, 1, 9, 0, 2, 5, 5, 2, 2, 0, 4, 1, 7, 6, 3, 3, 4, 1, 0, 6, 7, 2, 8, 5, 3, 8, 2, 8, 3, 0, 6, 2, 6, 4, 5, 0, 1, 1, 6, 0, 0, 9, 2, 8, 0, 7, 4, 2, 4, 5, 9, 3, 9, 6, 7, 5, 1, 7, 4, 0, 1, 3, 9, 2, 1, 1, 1, 3, 6, 8, 9, 0, 9, 5, 1, 2, 7, 6, 1, 0, 2, 0, 8, 8, 1, 6, 7, 0, 5, 3, 3, 6, 4, 2, 6, 9, 1, 4, 1, 5, 3, 1, 3, 2, 2, 5, 0, 5, 8, 0, 0, 4, 6, 4, 0, 3, 7, 1, 2, 2, 9, 6, 9, 8, 3, 7, 5, 8, 7, 0, 0, 6, 9, 6, 0, 5, 5, 6, 8, 4, 4, 5, 4, 7, 5, 6, 3, 8, 0, 5, 1, 0, 4, 4, 0, 8, 3, 5, 2, 6, 6, 8, 2, 1, 3, 4, 5, 7, 0, 7, 6, 5, 6, 6, 1, 2, 5, 2, 9.

9, 9, 7, 6, 7, 9, 8, 1, 4, 3, 8, 5, 1, 5, 0, 9, 1, 2, 0, 6, 4, 9, 6, 5, 1, 9, 7, 2, 1, 5, 7, 7, 7, 2, 6, 2, 1, 8, 0, 9, 7, 4, 4, 7, 7, 0, 5, 8, 2, 3, 6, 6, 5, 8, 9, 3, 2, 7, 1, 4, 6, 1, 7, 1, 6, 9, 3, 7, 3, 5, 4, 9, 8, 8, 3, 0, 9, 0, 7, 1, 9, 2, 5, 7, 5, 4, 0, 6, 0, 3, 2, 4, 8, 2, 5, 9, 8, 6, 0, 7, 8, 8, 8, 6, 3, 1, 0, 9, 0, 4, 8, 7, 2, 3, 8, 9, 7, 9, 1, 1, 8, 3, 2, 9, 4, 6, 6, 3, 5, 7, 3, 0, 8, 5, 8, 4, 6, 8, 6, 7, 7, 4, 9, 4, 1, 9, 9, 5, 3, 5, 9, 6, 2, 8, 7, 7, 0, 3, 0, 1, 6, 2, 4, 1, 2, 9, 9, 3, 0, 3, 9, 4, 4, 3, 1, 5, 5, 4, 5, 2, 4, 3, 6, 1, 9, 4, 8, 9, 5, 5, 9, 1, 6, 4, 7, 3, 3, 1, 7, 8, 6, 5, 4, 2, 9, 2, 3, 4, 3, 3, 8, 7, 4, 7, 0.
(Source: https://www.triforce.fyi/the-coded-prime-set)

Reference(s):

ELECTRONIC JOURNAL OF COMBINATORIAL NUMBER THEORY 7, (2007), "Generalizations of Midy's Theorem on Repeating Decimals" - Harold W. Martin, Department of Mathematics and Computer Science, Northern Michigan University, published January 25, 2007.

https://en.wikipedia.org/wiki/Modular_arithmetic

[*end 6.22.25 content*]
[*begin original content*]
Gravity is hardly the whole story here. It's barely a footnote, though it is a place to start.
Down toward the bottom, I provide evidence that protons are spinors. So, stay tuned for the Coded Prime Set (or click here.)
Once you understand the Coded Prime Set, you are ready for the real lesson; the Mechanical Prime Set. Click here.
**** 5.27.24 update *** I adjusted some of the language to hammer home the interrelationship of uncertainty and isotropy.*

Science is an incredibly useful tool, but it has limits. One limitation is the requirement that the frame of reference utilized is always that of the observer, situated in spacetime. Any activity that places the frame of reference anywhere but with the observer, by definition, is not scientific.

As it happens, the only way to understand gravity in harmony with all other observed forces described by the Standard Model of Particle Physics is to place the frame of reference within the particle itself, rather than the spacetime observer. In simplest terms, you must be the particle (*insert Caddyshack 2 .gif here*) and nothing else. Critically, reassigning the frame of reference to the particle eliminates the confusion caused by isotropy which permits everything else to just fall into place.

Within the particle itself, space and time have no general meaning. Within the particle, what matters is:
1. the isotropic frame of reference;
2. the certainty and uncertainty of position and momentum;
3. internal degrees of freedom, including the manner of expression at different numbers of degrees of freedom, ranging from zero to four;
4. magnetic moment; and
5. anomalous magnetic moment.

There are 5 fundamental scales, each corresponding to the number of internal degrees of freedom of a particle (call them dimensions if you must; I don't want to but I think I need to):
(0) Singularity "Planck" Scale (below 10 to the -35m);
(1) Vector "Mycelial" Scale (between 10 to the -35m and 10 to the -20m);
(2) Quantum Scale (between 10 to the -20m and 10 to the -9m);
(3) Classical "Life" Scale (between 10 to the -9m and 10 to the 25m, or thereabouts); and
(4) Cosmic Scale (above 10 to the 25m, or thereabouts).

Internal degrees of freedom share an inverse relationship with isotropy. At the Singularity Scale, isotropy is essentially unrestricted (and yes, 0-dimensional physics is a thing.) At the Vector Scale, isotropy is restricted one-dimensionally, at the Quantum Scale 2-dimensionally, 3-dimensonally at the Classical Scale and 4-dimensionally at the Cosmic Scale. Think about it this way. If something exists 2-dimensionally, how can it have a fixed reference point in 3 dimensions? The simple answer is that it cannot, hence the isotropy. In essence, isotropy is the universe's version of a "null" value; akin to what is known (but generally disfavored) in the realm of computer programming. Eitherwise, it needs to be understood that an "internal degree of freedom" is also a "degree of isotropic restriction."

Cracking on… gravity arises at the Vector (Mycelial) Scale. It is an expression of vectored (*i.e.*, expressed along a single "one-dimensional" internal degree of freedom) electron magnetic moment. This is why, among other things, gravity always points back toward the electron (and why positrons generate anti-gravity.) In simplest terms, relative to our own frame of reference; gravity is how electrons behave when expressing along one "real" (*i.e.*, "kinetic," used interchangeably hereafter) dimension and two isotropic dimensions.

An electron's magnetic moment is anti-parallel to spin, so when spin is expressed one-dimensionally as a vector, the magnetic moment likewise expresses as a vector, pointing in the opposite direction of momentum; this means back toward the particle as opposed to out from it (subject to the slight offset of the electron's small anomalous magnetic moment.)

Gravity being vector-mechanical in nature rather than quantum-mechanical is also why it appears so much weaker than quantum electromagnetism, the weak force and the strong force. Each of the latter three forces express quantum mechanically (*i.e.*, two kinetic dimensions and one isotropic, relative to us) whereas gravity is vector-mechanical (*i.e.*, one kinetic dimension and two isotropic, relative to us) electromagnetism.

The upshot here is that mass/energy increase exponentially with the increased number of degrees of freedom along which a particle expresses. In other words, expressing along kinetic dimensions increases mass/energy while expressing isotropically does not. The mass/energy increase from combining multiple kinetic dimensions is exponential (*i.e.*, a logarithmic increase) rather than additive.

This begs reexamining the answers to some basic questions. What are mass and energy, why do they exist and why they are not conserved quantities? Or, perhaps the question is how are they conserved quantities? I suppose it depends on whether you are a glass half-full or glass half-empty sort of person.

It is well understood that mass and energy are equivalent. That's the whole point of special relativity. What needs to be understood now is that mass and energy are themselves expressions of a particle's positional certainty which directly corresponds to its momentum uncertainty. The greater a particle's positional certainty (*i.e.* the lower its momentum certainty or the greater its momentum uncertainty) the greater its mass and energy.

Also, and this is critical:
isotropic = potential

The mass/energy of a particle is determined by the certainty/uncertainty (isotropy) of its momentum and position. It is well understood and uncontroversial that energy can be either kinetic or potential. Likewise, momentum and position (and thereby mass) can be either kinetic or potential.

Certain momentum is potential, while uncertain (isotropic) momentum is kinetic (because things can hit you from any direction.) Conversely, certain position is kinetic (because you can hit things in any direction) while uncertain (isotropic) position is potential.

At the Singularity "Planck" Scale, momentum is essentially zero. Zero is the most certain number. Ergo, at the Singularity Scale, momentum is essentially, completely certain (I note "essentially" because the cosmos tends not to permit absolutes… it insists we take everything with a grain of salt.) Position at this scale is therefore essentially, completely uncertain. Both momentum and position at the Singularity Scale are essentially completely isotropic. This means that essentially nothing can interact with the particle, at any time or from any direction or distance.

Conversely to zero, infinity is the least certain number. At the Cosmic Scale, therefore, where particles express along four internal degrees of freedom (*i.e.*, 4-dimensionally;) momentum is essentially completely uncertain while position is essentially completely certain. In other words, both momentum and position have shed all isotropy and are essentially completely kinetic. This means anything any everything can interact with the particle, at any and all times, from any and all directions and distances.

In between these two extremes, we have the Vector (Mycelial), Quantum and Classical Scales wherein we see momentum and position certainty and uncertainty switch places one internal degree of freedom at a time.

Human consciousness is primarily bound up in, and perceived solely as, the Classical Scale. This means we perceive 3 real dimensions and one isotropic. So, for example, when we look at quantum mechanical behaviors, we are perceiving two real dimensions and one isotropic. When we look at gravity we are perceiving it as one real dimension and two isotropic.

Similarly, when we look out at the stars (*i.e.*, toward the Cosmic Scale,) we perceive the universe as isotropic. Astronomers tell us that the universe appears to extend out about evenly in all directions, as if the Earth were somehow the center of the universe. This is because, at the Classical Scale, we only have three real dimensions to work with; causing the fourth dimension to appear to us as isotropic.

Since mass and energy are expressions of a particle's positional certainty, and momentum uncertainty increases with the number of internal degrees of freedom along which a particle is expressing; the higher the number of internal degrees of freedom, the higher the mass and energy.

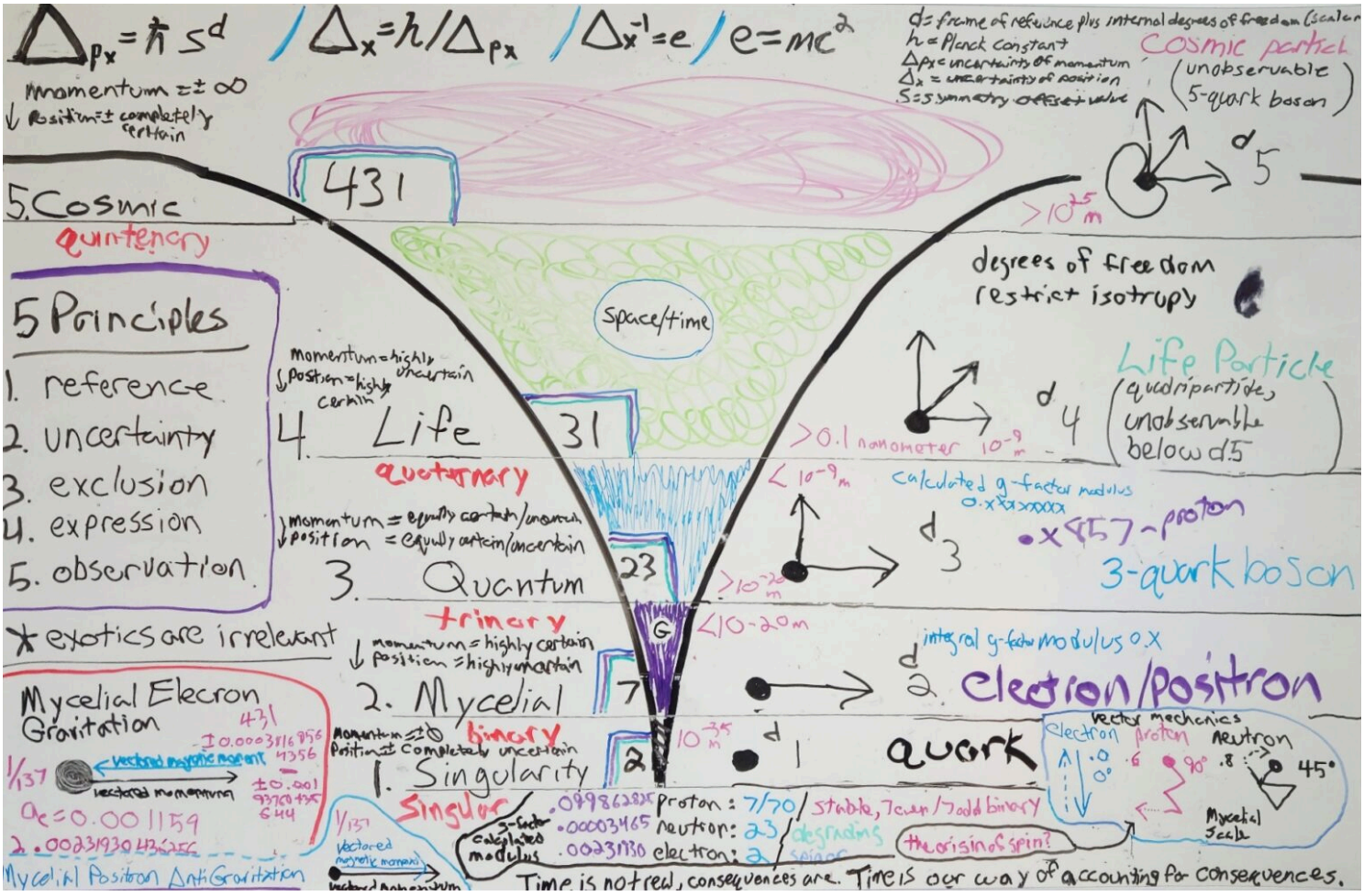
Gravity is weaker than the other forces because gravity is electromagnetism expressed at one degree of freedom (*i.e.*, one kinetic dimension and three isotropic (two from our perspective)) when the other forces express quantum-mechanically, along two internal degrees of freedom (*i.e.*, two kinetic dimensions and two isotropic (one from our perspective.)) Keep in mind that all particles exist at all

scales simultaneously, even if they have no, or virtually no, observable or intuitable expression at some scales.

This interpretation of particle physics is also consistent with why mass/energy is not conserved during neutron decay. When a neutron decays, it decays (typically) into a w-boson, which has 1,000 times more mass/energy than the neutron. The w-boson then decays into a proton, electron and anti-neutrino, all of which combined have about 1.5 electron masses less mass/energy than the neutron.

In short, the w-boson is the momentary spike in a neutron's momentum uncertainty as it undergoes its transformation to its decay products, all of which combined have higher momentum certainty (therefore higher isotropy, lower positional certainty and less mass/energy) than the original neutron. Yes, the "Higgs boson" is a total scam… it's like Blade said, "some [people are] always trying to ice-skate uphill."

Here is a whiteboard I marked up for some additional context. Not all of it is relevant, some are interim notes, some parts are likely wrong… but most of it should be useful. The equations at the top correlate uncertainty (isotropy) with mass/energy.



I labeled the second scale (1 degree of freedom) the “Mycelial” scale rather than the “Vector” scale in the above illustration in hopes it would help people visualize the behavior of vectored momentum, which is not too dissimilar to the way that fungi extend mycelial filaments to create underground networks. Gravitational waves can be particularly useful in understanding and visualizing the one-dimensional, mycelium-like behavior of particles.

We know that when a neutron decays, it essentially converts to a proton by throwing off an electron. Both the electron and proton would be new particles which would need to extend their vectored momentum, their mycelium, however far out they go among the mycelium of all the other electrons, protons and neutrons. This would not happen instantaneously because of limits like the speed of light. The best number I saw for the speed at which a gravitational wave propagates is about 0.1% the speed of light. Were an event to occur which resulted in a very large number of new electrons being generated in a concentrated area very quickly, the propagation of electron mycelium from that event would travel out as a gravitational wave as all those new electrons establish their places in the larger mycelial network.

I won’t go into it much here, but the use of a frame of reference without what we call spacetime requires a reinterpretation of what we call a “field.” Space does not exist and the universe has no intrinsic “field(s).” Rather, it is more like particles generate their own fields as a function of their degree of unrestricted isotropy which decreases as internal degrees of freedom increase.

In other words, when the movement of a particle along one or more dimensions is restricted by its scale; the particle takes on a “null” value for those dimensions as opposed to as zero value. The “null” value, much like in computer programming is a value that stands in for all possible outcomes, but does not express any individual outcome unless forced. The gravitational field of an electron (or positron) arises from these null values, which cause the particle to be sufficiently, spatially undefined so as to occupy an enormous amount (if not effectively all of) of what we perceive as space and/or the universe.

The trade-off is that, at the scale the electron (or positron) expresses gravity (or anti-gravity,) while it may somewhat slowly extend itself throughout the universe; it can only interact with the rest of the universe along a single kinetic dimension, and only weakly because the mass/energy of a particle, and therefore the influence of its magnetic moment, decreases logarithmically with the decrease in kinetic dimensions along which a particle expresses (corresponding to an increase in isotropic dimensions.)

In short, gravitational fields arise at the Mycelial (Vector) Scale (one real dimension, three isotropic.) They take the form of a large, interconnected mycelial network, driven by fermions (electrons and positrons,) but influencing (mostly) protons, anti-protons and neutrons, all of which have their own, more localized mycelium (*see, the illustration in the bottom right corner of the whiteboard above.*)

More generally speaking, I think it is fair to say that subject to the limitations of the (Pauli) Exclusion Principle, what we perceive as a field (*i.e.*, space) is the extent to which each particle occupies the universe or a significant fraction thereof… sort of like a big bang universe, but without the bang. In short, the interplay between a particle's intrinsic "field(s)" and the intrinsic "field(s)" of other particles is governed principally by both the Uncertainty Principle and (Pauli) Exclusion Principle, and as generally described by known physical laws. Ultimately, visualize and characterize in whatever way works for you, if it actually works for you; these are deep waters.

Same topic, different angle. Why hasn't anyone ever looked at the additive modulo (2-dimensional rotation) for the calculated g-factors of the electron, proton and neutron? Here is one view of what that looks like with the positron and anti-proton thrown in for good measure:

G-Factor Modulus Results:		Proton	Anti-Proton	Electron	Positron	Neutron
neutron precession		W boson	Z boson	2.00231930436256	1.99768069563744	3.82608545
a)	0.00000155	5.5856946893	5.4143053107	4.00463860872512	3.99536139127488	7.65217090
b)	0.00003316	11.1713893786	10.8286106214	6.00695791308768	5.99304208691232	11.47825635
neutron precession period		16.7570840679	16.2429159321	8.00927721745024	7.99072278254976	15.30434180
	28859	22.3427787572	21.6572212428	10.01159652181280	9.98840347818720	19.13042725
neutron period (symmetry)		27.9284734465	27.0715265535	12.01391582617540	11.98608417382460	22.95651270
	23	33.5141681358	32.4858318642	14.01623513053790	13.98376486946210	26.78259815
neutron rotations per period		39.0998628251	37.9001371749	16.01855443490050	15.98144556509950	30.60868360
	88	44.6855575144	43.3144424856	18.02087373926300	17.97912626073700	34.43476905
neutron periodic increment		50.2712522037	48.7287477963	20.02319304362560	19.97680695637440	38.26085450
	0.00003465	55.8569468930	54.1430531070	22.02551234798820	21.97448765201180	42.08693995
proton/anti-proton precession		61.4426415823	59.5573584177	24.02783165235070	23.97216834764930	45.91302540
a)	0.0002699770 - 0.0013693100	67.0283362716	64.9716637284	26.03015095671330	25.96984904328670	49.73911085
b)	0.0000024390 - 0.0011017720	72.6140309609	70.3859690391	28.03247026107580	27.96752973892420	53.56519630
proton/anti-proton precession period		78.1997256502	75.8002743498	30.03478956543840	29.96521043456160	57.39128175
	5,117 / 5,047	83.7854203395	81.2145796605	32.03710886980090	31.96289113019910	61.21736720
proton/anti-proton period (symmetry)		89.3711150288	86.6288849712	34.03942817416350	33.96057182583650	65.04345265
	7 | 70	94.9568097181	92.0431902819	36.04174747852610	35.95825252147390	68.86953810
proton/anti-proton rotations per period		100.5425044074	97.4574955926	38.04406678288860	37.95593321711140	72.69562355
	39 | 391	106.1281990967	102.8718009033	40.04638608725120	39.95361391274880	76.52170900
proton/anti-proton periodic increment/decrement		111.7138937860	108.2861062140	42.04870539161370	41.95129460838630	80.34779445
	0.0998628251	117.2995884753	113.7004115247	44.05102469597630	43.94897530402370	84.17387990
deviation from 0.1 (binary) increment/decrement		122.8852831646	119.1147168354	46.05334400033890	45.94665599966110	87.99996535
	0.0001371749	128.4709778539	124.5290221461	48.05566330470140	47.94433669529860	91.82605080
electron/positron precession		134.0566725432	129.9433274568	50.05798260906400	49.94201739093600	95.65213625
a)	0.00193760435644	139.6423672325	135.3576327675	52.06030191342650	51.93969808657350	99.47822170
b)	0.00038169564356	145.2280619218	140.7719380782	54.06262121778910	53.93737878221090	103.30430715
electron/positron precession period	431	150.8137566111	146.1862433889	56.06494052215160	55.93505947784840	107.13039260
electron/positron period (spinor)	2	156.3994513004	151.6005486996	58.06725982651420	57.93274017348580	110.95647805
electron/positron rotations per period	2	161.9851459897	157.0148540103	60.06957913087680	59.93042086912320	114.78256350
electron/positron periodic increment		167.5708406790	162.4291593210	62.07189843523930	61.92810156476070	118.60864895
	0.00231930436256	173.1565353683	167.8434646317	64.07421773960190	63.92578226039810	122.43473440

178.7422300576	173.2577699424	66.07653704396440	65.92346295603560	126.26081985
184.3279247469	178.6720752531	68.07885634832700	67.92114365167300	130.08690530
189.9136194362	184.0863805638	70.08117565268960	69.91882434731040	133.91299075
195.4993141255	189.5006858745	72.08349495705210	71.91650504294790	137.73907620
201.0850088148	194.9149911852	74.08581426141470	73.91418573858530	141.56516165
206.6707035041	200.3292964959	76.08813356577720	75.91186643422280	145.39124710
212.2563981934	205.7436018066	78.09045287013980	77.90954712986020	149.21733255
217.8420928827	211.1579071173	80.09277217450230	79.90722782549770	153.04341800
223.4277875720	216.5722124280	82.09509147886490	81.90490852113510	156.86950345
229.0134822613	221.9865177387	84.09741078322750	83.90258921677250	160.69558890
234.5991769506	227.4008230494	86.09973008759000	85.90026991241000	164.52167435
240.1848716399	232.8151283601	88.10204939195260	87.89795060804740	168.34775980
245.7705663292	238.2294336708	90.10436869631510	89.89563130368490	172.17384525
251.3562610185	243.6437389815	92.10668800067770	91.89331199932230	175.99993070
256.9419557078	249.0580442922	94.10900730504030	93.89099269495970	179.82601615
262.5276503971	254.4723496029	96.11132660940280	95.88867339059720	183.65210160
268.1133450864	259.8866549136	98.11364591376540	97.88635408623460	187.47818705
273.6990397757	265.3009602243	100.11596521812800	99.88403478187210	191.30427250
279.2847344650	270.7152655350	102.11828452249000	101.88171547751000	195.13035795
284.8704291543	276.1295708457	104.12060382685300	103.87939617314700	198.95644340
290.4561238436	281.5438761564	106.12292313121600	105.87707686878400	202.78252885
296.0418185329	286.9581814671	108.12524243557800	107.87475756442200	206.60861430
301.6275132222	292.3724867778	110.12756173994100	109.87243826005900	210.43469975
307.2132079115	297.7867920885	112.12988104430300	111.87011895569700	214.26078520
312.7989026008	303.2010973992	114.13220034866600	113.86779965133400	218.08687065
318.3845972901	308.6154027099	116.13451965302800	115.86548034697200	221.91295610
323.9702919794	314.0297080206	118.13683895739100	117.86316104260900	225.73904155
329.5559866687	319.4440133313	120.13915826175400	119.86084173824600	229.56512700
335.1416813580	324.8583186420	122.14147756611600	121.85852243388400	233.39121245
340.7273760473	330.2726239527	124.14379687047900	123.85620312952100	237.21729790
346.3130707366	335.6869292634	126.14611617484100	125.85388382515900	241.04338335
351.8987654259	341.1012345741	128.14843547920400	127.85156452079600	244.86946880
357.4844601152	346.5155398848	130.15075478356600	129.84924521643400	248.69555425

363.0701548045	351.9298451955	132.15307408792900	131.84692591207100	252.52163970
368.6558494938	357.3441505062	134.15539339229100	133.84460660770900	256.34772515
374.2415441831	362.7584558169	136.15771269665400	135.84228730334600	260.17381060
379.8272388724	368.1727611276	138.16003200101700	137.83996799898300	263.99989605
385.4129335617	373.5870664383	140.16235130537900	139.83764869462100	267.82598150
390.9986282510	379.0013717490	142.16467060974200	141.83532939025800	271.65206695
396.5843229403	384.4156770597	144.16698991410400	143.83301008589600	275.47815240
402.1700176296	389.8299823704	146.16930921846700	145.83069078153300	279.30423785
407.7557123189	395.2442876811	148.17162852282900	147.82837147717100	283.13032330
413.3414070082	400.6585929918	150.17394782719200	149.82605217280800	286.95640875
418.9271016975	406.0728983025	152.17626713155500	151.82373286844500	290.78249420
424.5127963868	411.4872036132	154.17858643591700	153.82141356408300	294.60857965
430.0984910761	416.9015089239	156.18090574028000	155.81909425972000	298.43466510
435.6841857654	422.3158142346	158.18322504464200	157.81677495535800	302.26075055
441.2698804547	427.7301195453	160.18554434900500	159.81445565099500	306.08683600
446.8555751440	433.1444248560	162.18786365336700	161.81213634663300	309.91292145
452.4412698333	438.5587301667	164.19018295773000	163.80981704227000	313.73900690
458.0269645226	443.9730354774	166.19250226209300	165.80749773790700	317.56509235
463.6126592119	449.3873407881	168.19482156645500	167.80517843354500	321.39117780
469.1983539012	454.8016460988	170.19714087081800	169.80285912918200	325.21726325
474.7840485905	460.2159514095	172.19946017518000	171.80053982482000	329.04334870
480.3697432798	465.6302567202	174.20177947954300	173.79822052045700	332.86943415
485.9554379691	471.0445620309	176.20409878390500	175.79590121609500	336.69551960
491.5411326584	476.4588673416	178.20641808826800	177.79358191173200	340.52160505
497.1268273477	481.8731726523	180.20873739263100	179.79126260736900	344.34769050
502.7125220370	487.2874779630	182.21105669699300	181.78894330300700	348.17377595
508.2982167263	492.7017832737	184.21337600135600	183.78662399864400	351.99986140
513.8839114156	498.1160885844	186.21569530571800	185.78430469428200	355.82594685
519.4696061049	503.5303938951	188.21801461008100	187.78198538991900	359.65203230
525.0553007942	508.9446992058	190.22033391444400	189.77966608555700	363.47811775
530.6409954835	514.3590045165	192.22265321880600	191.77734678119400	367.30420320
536.2266901728	519.7733098272	194.22497252316900	193.77502747683100	371.13028865
541.8123848621	525.1876151379	196.22729182753100	195.77270817246900	374.95637410

547.3980795514	530.6019204486	198.22961113189400	197.77038886810600	378.78245955
552.9837742407	536.0162257593	200.23193043625600	199.76806956374400	382.60854500
558.5694689300	541.4305310700	202.23424974061900	201.76575025938100	386.43463045
564.1551636193	546.8448363807	204.23656904498200	203.76343095501900	390.26071590
569.7408583086	552.2591416914	206.23888834934400	205.76111165065600	394.08680135
575.3265529979	557.6734470021	208.24120765370700	207.75879234629300	397.91288680
580.9122476872	563.0877523128	210.24352695806900	209.75647304193100	401.73897225
586.4979423765	568.5020576235	212.24584626243200	211.75415373756800	405.56505770
592.0836370658	573.9163629342	214.24816556679400	213.75183443320600	409.39114315
597.6693317551	579.3306682449	216.25048487115700	215.74951512884300	413.21722860
603.2550264444	584.7449735556	218.25280417552000	217.74719582448100	417.04331405
608.8407211337	590.1592788663	220.25512347988200	219.74487652011800	420.86939950
614.4264158230	595.5735841770	222.25744278424500	221.74255721575500	424.69548495
620.0121105123	600.9878894877	224.25976208860700	223.74023791139300	428.52157040
625.5978052016	606.4021947984	226.26208139297000	225.73791860703000	432.34765585
631.1834998909	611.8165001091	228.26440069733200	227.73559930266800	436.17374130
636.7691945802	617.2308054198	230.26672000169500	229.73327999830500	439.99982675
642.3548892695	622.6451107305	232.26903930605800	231.73096069394300	443.82591220
647.9405839588	628.0594160412	234.27135861042000	233.72864138958000	447.65199765
653.5262786481	633.4737213519	236.27367791478300	235.72632208521700	451.47808310
659.1119733374	638.8880266626	238.27599721914500	237.72400278085500	455.30416855
664.6976680267	644.3023319733	240.27831652350800	239.72168347649200	459.13025400
670.2833627160	649.7166372840	242.28063582787000	241.71936417213000	462.95633945
675.8690574053	655.1309425947	244.28295513223300	243.71704486776700	466.78242490
681.4547520946	660.5452479054	246.28527443659600	245.71472556340400	470.60851035
687.0404467839	665.9595532161	248.28759374095800	247.71240625904200	474.43459580
692.6261414732	671.3738585268	250.28991304532100	249.71008695467900	478.26068125
698.2118361625	676.7881638375	252.29223234968300	251.70776765031700	482.08676670
703.7975308518	682.2024691482	254.29455165404600	253.70544834595400	485.91285215
709.3832255411	687.6167744589	256.29687095840800	255.70312904159200	489.73893760
714.9689202304	693.0310797696	258.29919026277100	257.70080973722900	493.56502305
720.5546149197	698.4453850803	260.30150956713400	259.69849043286600	497.39110850
726.1403096090	703.8596903910	262.30382887149600	261.69617112850400	501.21719395

What does the above show? Lots. Among other things, it demonstrates that quantum mechanics is literally the observation of 2-dimensional behaviors of particles within the 3-diminsional observer frame of reference required by science. I know this is only a modicum of evidence, but that's what the pages for the Coded Prime Set and Mechanical Prime Set are for. Isotropy is inherently confusing, so tread lightly.

Do you see the proton behaving as a spinor? That's why I color-coded blue and red. The integral modulo or 1st-digit modulo (*i.e.*, the first number to the right of the decimal point) repeats 7 odd numbers followed by 7 even numbers. Draw a sine wave around a circle numbered like a clock from 0 to 9 with the wave passing through the radius of each number once, in order, alternating between peaks and valleys for each number, and what you get is all the peaks on odd numbers and all the valleys on even numbers, or vice-versa. You can picture it like a 5-tooth gear or 5-pointed star if you want. Proton magnetic moment visits peaks 7 times in a row and then must visit valleys 7 times in a row before returning to peaks 7 times in a row and then valleys 7 times in a row, and so on and so forth.

There is room, right at the beginning, for the w-boson because the first odd set includes only 6 numbers, not 7. While that is not a unique occurrence in the modulo, it is rare; on the order of about one in five thousand. The 2nd-digit modulo (*i.e.*, the second number to the right of the decimal point) controls where within the set of 7 the anomaly will occur as well as whether or not the symmetry will eventually break. The 2nd-digit modulo for the proton has a descending order (beginning with 9, 8, 7, 5, 4, 2, 1,) and since the proton has a descending periodic increment; the anomaly will always be corrected for at the end of a set. So, only sets of 6 and 7 are possible with sets of 7 being about five thousand times more likely than a set of 6. That relationship continues on into infinity (*i.e.*, it remains stable and never breaks) and would present in something like a supercollider as an occasional spike in the mass/energy detected in a collision event. Eitherwise, it looks to me like protons are spinors, just like electrons… the other stable, charge-carrying particle. If you're curious, the proton g-factor is 5.5856946893(16) (you can ignore the integer value, only the remainder is relevant.) This places it (more or less) within the .X857142 subgroup of the .857142 7-fold prime symmetry. Here is a visual (note that only X=1, X=3 and X=5 behave as spinors, with X=5 incrementing 0.1 while X=1 increments 0.3 and X=3 increments 0.7):

0.0857	0.1857	0.2857	0.3857	0.4857	0.5857	0.6857	0.7857	0.8857	0.9857
0.1714	0.3714	0.5714	0.7714	0.9714	1.1714	1.3714	1.5714	1.7714	1.9714
0.2571	0.5571	0.8571	1.1571	1.4571	1.7571	2.0571	2.3571	2.6571	2.9571
0.3428	0.7428	1.1428	1.5428	1.9428	2.3428	2.7428	3.1428	3.5428	3.9428
0.4285	0.9285	1.4285	1.9285	2.4285	2.9285	3.4285	3.9285	4.4285	4.9285
0.5142	1.1142	1.7142	2.3142	2.9142	3.5142	4.1142	4.7142	5.3142	5.9142
0.5999	1.2999	1.9999	2.6999	3.3999	4.0999	4.7999	5.4999	6.1999	6.8999
0.6856	1.4856	2.2856	3.0856	3.8856	4.6856	5.4856	6.2856	7.0856	7.8856
0.7713	1.6713	2.5713	3.4713	4.3713	5.2713	6.1713	7.0713	7.9713	8.8713
0.857	1.857	2.857	3.857	4.857	5.857	6.857	7.857	8.857	9.857
0.9427	2.0427	3.1427	4.2427	5.3427	6.4427	7.5427	8.6427	9.7427	10.8427
1.0284	2.2284	3.4284	4.6284	5.8284	7.0284	8.2284	9.4284	10.6284	11.8284
1.1141	2.4141	3.7141	5.0141	6.3141	7.6141	8.9141	10.2141	11.5141	12.8141
1.1998	2.5998	3.9998	5.3998	6.7998	8.1998	9.5998	10.9998	12.3998	13.7998
1.2855	2.7855	4.2855	5.7855	7.2855	8.7855	10.2855	11.7855	13.2855	14.7855
1.3712	2.9712	4.5712	6.1712	7.7712	9.3712	10.9712	12.5712	14.1712	15.7712
1.4569	3.1569	4.8569	6.5569	8.2569	9.9569	11.6569	13.3569	15.0569	16.7569
1.5426	3.3426	5.1426	6.9426	8.7426	10.5426	12.3426	14.1426	15.9426	17.7426
1.6283	3.5283	5.4283	7.3283	9.2283	11.1283	13.0283	14.9283	16.8283	18.7283
1.714	3.714	5.714	7.714	9.714	11.714	13.714	15.714	17.714	19.714
1.7997	3.8997	5.9997	8.0997	10.1997	12.2997	14.3997	16.4997	18.5997	20.6997
1.8854	4.0854	6.2854	8.4854	10.6854	12.8854	15.0854	17.2854	19.4854	21.6854
1.9711	4.2711	6.5711	8.8711	11.1711	13.4711	15.7711	18.0711	20.3711	22.6711
2.0568	4.4568	6.8568	9.2568	11.6568	14.0568	16.4568	18.8568	21.2568	23.6568
2.1425	4.6425	7.1425	9.6425	12.1425	14.6425	17.1425	19.6425	22.1425	24.6425
2.2282	4.8282	7.4282	10.0282	12.6282	15.2282	17.8282	20.4282	23.0282	25.6282
2.3139	5.0139	7.7139	10.4139	13.1139	15.8139	18.5139	21.2139	23.9139	26.6139

The modulo for the neutron is just as fascinating. It is a very tight, 23-fold symmetry which, to my eye, very slowly counts down toward destruction. Unlike exotics, which decay in a fraction of a nanosecond or faster; a free neutron will decay in around 20 minutes. I'm guessing the modulo provides the countdown to that decay, which if true, corresponds to a neutron spin rate of about 2,000 rotations per second. A non-free neutron, like those found in atomic nuclei, are subjected to constant perturbation; constantly resetting that very long clock and causing those neutrons to remain stable.

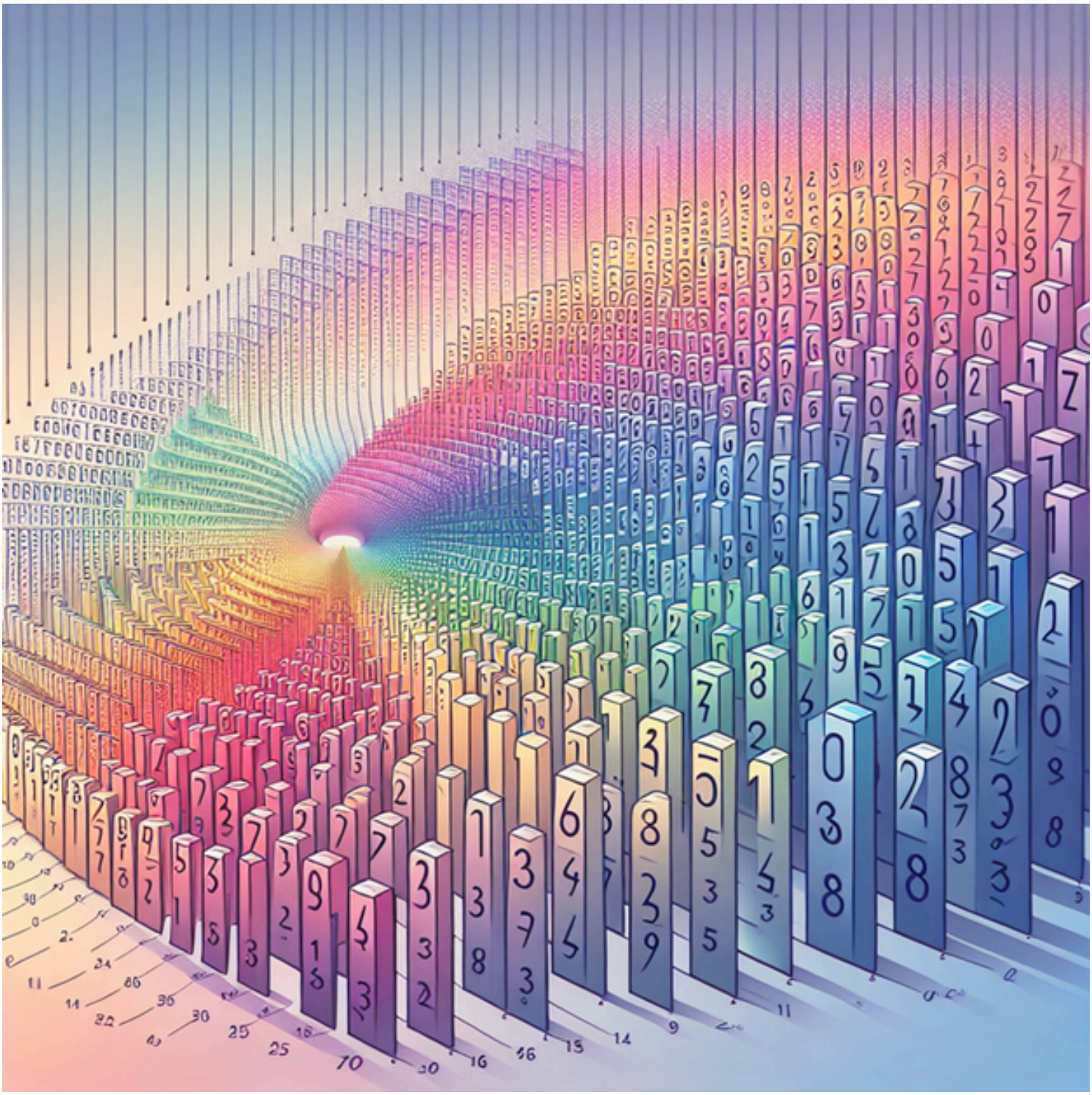
Again, if you're curious, the neutron g-factor is -3.82608545 (you can ignore the negative sign and the integer value, just the remainder is relevant.) 23-fold symmetry has a repeating, 22-digit remainder in between integer values. For 19 divided by 23, the remainder begins with .826 (8260869565217391304347 in full.) Other prime numbers, including 7, 17, 19, 29, 31, 61 and 431 follow the same pattern of their remainders including a repeating set of digits in quantity equal to the prime integer value minus one. In other words, any fraction of 7 will repeat the same 6 numbers, a fraction of 17 will repeat the same 16 numbers, a fraction of 19 will repeat the same 18 numbers, etc.

I know it seems a bit off-topic, but I find the behavior of the above-listed prime numbers fascinating. They are in a set of prime numbers with unique characteristics. Let's call it the "Coded Prime Set" (because there is a distinct string of numbers, a code, associated with each number in the Set.)

For example, the 7-fold symmetry that drives proton spin, as described above, has its source in the remainder behavior of the prime number 7. Any remainder that follows the sequence 1-4-2-8-5-7, when added to itself will exhibit 7-fold symmetry. Not all prime numbers behave this way; 3, 11 and 13 are not a part of the Set, and neither are other 2-digit primes like 73 and 89. Depending on how you define the Set, there could be an unbounded number of primes that meet the definition of the Set. I have defined the Set more narrowly, so there are a finite number of primes in the Set. That said, the prime number 431 is in the Set and (along with 3 other primes in the Set) is closely associated with the g-factors of the electron and positron.

The sequence has a direction (*i.e.*, it only goes forward, never backward) but is otherwise unrestricted insofar as the sequence can begin with any digit in the sequence, which is determined by which fraction of the prime you are looking at. In the case of the orientation relevant to protons, the sequence begins with 8, so 8-5-7-1-4-2 (which corresponds to 6 divided by 7.) The .X857142 subgroup is where you find the 5.5**8569**46893(16) proton g-factor. That shows the proton owes it's secondary, 7-fold symmetry (its primary symmetry period is 70,) and consequently some its spinor properties, to the unique behavior of the Coded Prime Set, or more specifically its nested subset, the Mechanical Prime Set.

Incidentally, only the 8-5-7-1-4-2 sequence has a descending 2nd-digit mod order (again, beginning with 9, 8, 7, 5, 4, 2, 1,) while only the 1-4-2-8-5-7 sequence has an ascending 2nd-digit mod order (beginning with 1, 2, 3, 5, 7, 8, 9.) Without either an ascending or descending order, even/odd symmetry cannot be maintained and spinor behavior is not possible. This suggests that the .X142857 subgroup is a strong candidate for the anti-proton g-factor. If that's the case, I can predict the anti-proton g-factor to be -5.4143053107. Not surprisingly, when you add that remainder to the remainder for the proton g-factor, you get a zero remainder (assuming, of course, you ignore the negative sign like you should.) That was probably an easier way to go about it, but this way was more interesting because it helps to show that the behaviors described are limited to a relatively small subset of the already small Coded Prime Set. Also, I like how this kind of math is non-linear and tends to curve and branch out a bunch. It reminds me of the Mandelbrot Set. Here is an image that may help to give a vague idea of what I am talking about:



In fact, each of the three stable particles which comprise our observable universe, the electron, the proton and the neutron, as well as the 2 additional stable particles (positron and anti-proton) that comprise the unobservable universe (here, “observable” is meant in the astronomical sense,) owe their unique behaviors to their relationship with a specific prime number in the Coded Prime Set, or in the case of the electron and positron; 4 different numbers in the Set (2, 23, 31 and 431.)

First, there is the electron and positron. They are known spinors with a period of 2. I had nothing to do with that particular breakthrough, I just read about it. Then there are the proton and anti-proton which

get their spinor behavior from the prime number 7. Next, there is the neutron which gets its stability as well as it's free decay clock from the prime number 23.

Finally, the electron and positron also appear to additionally relate to both 23 and 31 as well as 431. The 7th-10th digits of the electron g-factor is 3-0-4-3, while the 7th through 10th digits for the positron is 6-9-5-6. I suspect this has something to do with nuclear physics. The 4th-7th digits of the electron and positron g-factors seem to relate somewhat more weakly to 31-fold symmetry, with 4-8-0-6 and 3-1-9-3, respectively. I do not currently have any ideas on what that is all about, in part because the patterns overlap on the 7th digit.

Electrons and positrons share their strongest correlation with the prime number 431, which is in the Coded Prime Set and is also the exact length of the electron/positron integer increment period. The 431 code includes both 0-0-2-3-2-0 and 9-9-7-6-7-9 whereas the electron g-factor remainder begins 0-0-2-3-1-9 and the positron g-factor remainder beings 9-9-7-6-8-0.

I'll do my best not to make mistakes, but there's an average chance. Eitherwise, here are the codes in Coded Prime Set (I am not including 43 or 47, or anything over 97… I think the point gets sufficiently made):

2 (1-digit): 5 (**electron/positron**)
7 (6-digit): 1, 4, 2, **8, 5, 7** (**proton/anti-proton**)
17 (16-digit): 0, 5, 8, 8, 2, 3, 5, 2, 9, 4, 1, 1, 7, 6, 4, 7
19 (18-digit): 0, 5, 2, 6, 3, 1, 5, 7, 8, 9, 4, 7, 3, 6, 8, 4, 2, 1
23: (22-digit): 0, 4, 3, 4, 7, **8, 2, 6, 0, 8, 6**, 9, 5, 6, 5, 2, 1, 7, 3, 9, 1, 3 (**neutron**, electron/positron)
29 (28-digit): 0, 3, 4, 4, 8, 2, 7, 5, 8, 6, 2, 0, 6, 8, 9, 6, 5, 5, 1, 7, 2, 4, 1, 3, 7, 9, 3, 1
31 (2x 15-digit): 0, 3, 2, 2, 5, 8, 0, 6, 4, 5, 1, 6, 1, 2, 9 – 0, 9, 6, 7, 7, 4, 1, 9, 3, 5, 4, 8, 3, 8, 7 (electron/positron)
61 (60-digit): 0, 1, 6, 3, 9, 3, 4, 4, 2, 6, 2, 2, 9, 5, 0, 8, 1, 9, 6, 7, 2, 1, 3, 1, 1, 4, 7, 5, 5, 4, 9, 8, 3, 6, 0, 6, 5, 5, 7, 3, 7, 7, 0, 4, 9, 1, 8, 0, 3, 2, 7, 8, 6, 8, 8, 5, 2, 4, 5, 9
67 (2x 33-digit): 0, 1, 4, 9, 2, 5, 3, 7, 3, 1, 3, 4, 3, 2, 8, 3, 5, 8, 2, 0, 8, 9, 5, 5, 2, 2, 3, 8, 8, 0, 5, 9, 7, – 0, 2, 9, 8, 5, 0, 7, 4, 6, 2, 6, 8, 6, 5, 6, 7, 1, 6, 4, 1, 7, 9, 1, 0, 4, 4, 7, 7, 6, 1, 1, 9, 4
71 (2x 35-digit): 0, 1, 4, 0, 8, 4, 5, 0, 7, 0, 4, 2, 2, 5, 3, 5, 2, 1, 1, 2, 6, 7, 6, 0, 5, 6, 3, 3, 8, 0, 2, 8, 1, 6, 9 – 0, 9, 8, 5, 9, 1, 5, 4, 9, 2, 9, 5, 7, 7, 4, 6, 4, 7, 8, 8, 7, 3, 2, 3, 9, 4, 3, 6, 6, 1, 9, 7, 1, 8, 3
83 (2x 41-digit): 0, 1, 2, 0, 4, 8, 1, 9, 2, 7, 7, 1, 0, 8, 4, 3, 3, 7, 3, 4, 9, 3, 9, 7, 5, 9, 0, 3, 6, 1, 4, 4, 5, 7, 8, 3, 1, 3, 2, 5, 3 – 0, 2, 4, 0, 9, 6, 3, 8, 5, 5, 4, 2, 1, 6, 8, 6, 7, 4, 6, 9, 8, 7, 9, 5, 1, 8, 0, 7, 2, 2, 8, 9, 1, 5, 6, 6, 2, 6, 5, 0, 6

97 (96-digit): 0, 1, 0, 3, 0, 9, 2, 7, 8, 3, 5, 0, 5, 1, 5, 4, 6, 3, 9, 1, 7, 5, 2, 5, 7, 7, 3, 1, 9, 5, 8, 7, 6, 2, 8, 8, 6, 5, 9, 7, 9, 3, 8, 1, 4, 4, 3, 2, 9, 8, 9, 6, 9, 0, 7, 2,1, 6, 4, 9, 4, 8, 4, 5, 3, 6, 0, 8, 2, 4, 7, 4, 2, 2, 6, 8, 0, 4, 1, 2, 3, 7, 1, 1, 3, 4, 0, 2, 0, 6,1, 8, 5, 5, 6, 7

What you are looking at are fixed paths, mathematically carved into the foundation of reality, and not merely the result of arbitrary and abstract equations (*i.e.*, most integers you can take apart any which way, and put them back together similarly, but these numbers have only one way to be taken apart and one way to be put back together… except in the case of Type-B coded primes like 31 and 431 where there are technically 2 ways.) It is not coincidence that the calculated g-factors for protons, neutrons and electrons (and thereby positrons and anti-protons (as well as twotrons)) in other words all known, stable particles, track so closely. There is a lot to unpack, but in short, a string of at least 3+ digits (*i.e.*, a bit more than 3, not quite 4) is needed for a minimal, recognizable relation to a code, with more digits bringing you closer (these are infinitely repeating strings, so you never quite get there.) Also, these values are interrelated, internally logarithmic and all a bit wibbly-wobbly, timey-wimey. For more info, see the post for The Mechanical Prime Set. A map is desperately needed. I guess it wasn't so off-topic after all. More to come later.

Since you made it to the bottom of the page, here is an unhinged rant on a common refrain I hear from people with clinically low levels of imagination… click here!