

# Quantum Coherent Entangled Hydrogen Atom Non-Locality

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## Abstract

The discovery of a data based informational wave pattern infuses coherent entanglement into the system. This discovery of how to add coherent entanglement into the model provides the missing key, that has opened the door to understanding the universe. It is found that the inclusion of coherence and entanglement at the start of the system is extremely simple and in fact it is so simple that it has simply been overlooked. Entanglement and coherence are the most fundamental aspects of our universe. It is demonstrated that the basic model of the hydrogen atom is made from the CMB. If we add entanglement into this basic model of the hydrogen atom a math system called Wave Pattern Entangled Math is unveiled. This system of wave interference mathematics creates a data system in which entanglement and coherence can easily be understood. The final outcome is an unbreakable pattern of information, including entangled energy, entropy, spin, universal expansion, compression, velocity of light, C2, and Quantum Coherence.

## Keywords

Entropy Function, Entanglement, Entangled, Universal Matrix, Wave Pattern Entangled Math, WPEM, Complementarity, Causality, Wave-Particle Duality, Hydrogen Atom, C.M.B., Cosmic Microwave Background Wave, Frequency

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## 1. Introduction

The standard model of the hydrogen atom was discovered and agreed upon by many of the most prominent figures in science.

Scientists reached a point that stopped them. This failure point is because they all failed to discover the entanglement and the coherent pattern in their model of the hydrogen atom. If the former scientists of the 40s and 50s had a better understanding of entanglement and coherence they would have been able to con-

tinue this simple explanation of reality showing the CMB makes the hydrogen atom that expands to the make the entire universe in a single thermal dynamic interior system.

This failure point is why the science turned to particle, imaginary numbers, invented math systems and explanations of reality which are so complicated that no one can understand them. Yet, not one of these explanations has told us the most fundamental aspects of the universe. Such as, what the universe is.

## 2. It Is Very Clear What the Universe Is

The most basic building block of the universe is the hydrogen atom. 99.9% of everything in our universe is hydrogen atoms.

99.9% of an apple is apple. An apple is not made from cherries.

The universe is made of hydrogen! Thus, it must be a hydrogen atom!

This is what all the great scientists were trying to prove. However, at the time they were proving the universe is a hydrogen atom they did not know about entanglement or coherence. If the scientist in the 40s and 50s had a better understanding of entanglement they would have certainly finished the universal hydrogen atom model, and we could have avoided the confusion of the last 50+ years.

The crux of this argument rests on the fact that the universe not only abides by the thermal dynamic laws but creates them.

This means no energy, force, momentum, spin or anything is ever added or removed from the system. The system and all elements are expanded and compressed in a continuum that does not allow any element to act independently in the system. A change in one will change all other elements.

In this type of system everything that is in the system (energy, charge, momentum, spin, force, etc.) must be present and fully formed at the start of the system. For instance, we know the system has force, therefore that force must be present at the very start, and we can expand or stretch, compact, transpose, mirror this force, but we can never add or take away force.

This is true of data, information, entanglement and coherence. These things must be present at the start of the system, and they must be fully formed.

That is to say all the information or data needed for the universe to expand has to be there at the start. This makes sense if the universe is hydrogen atom all the information is exactly the same in a tiny hydrogen atom or universe size hydrogen atom. We also know that the energy in one tiny hydrogen atom is the same as the energy of the entire universe. (The Hydrogen Bomb released only a tiny amount of energy in the hydrogen atoms.)

In this paper we will demonstrate that all things needed to make the universe are in the hydrogen atom.

We need not invent any math to prove this argument. When we simply follow the work of the former great scientist and add in the modern elements such as entanglement and coherence.

### 3. Spectra of a Hydrogen Atom

Heisenberg showed that the atomic Spectra of a hydrogen atom is based on the numbers 1, 2, 3, 4, 5, 6, 7, 8, 9. Ritz noticed that they were fundamental frequencies. These fundamental frequencies were further found to fall into groups, the numbers in any one of those groups being associated with the series of integers 1, 2, 3, 4, 5, 6, 7, 8, 9 [1] [2].

When the single electron of a hydrogen atom is in its innermost orbit it is said to be in the normal state,  $n = 1$  the next orbit is  $n = 2, 3, 4, 5, 6, 7, 8, 9$ .

Schrödinger, Heisenberg, and Dirac all came up with methods to calculate the frequencies of the hydrogen atom and in the end, they all came up with the shells of the hydrogen atom in the perfect pattern of 1, 2, 3, 4, 5, 6, 7, 8, 9 [2] [3].

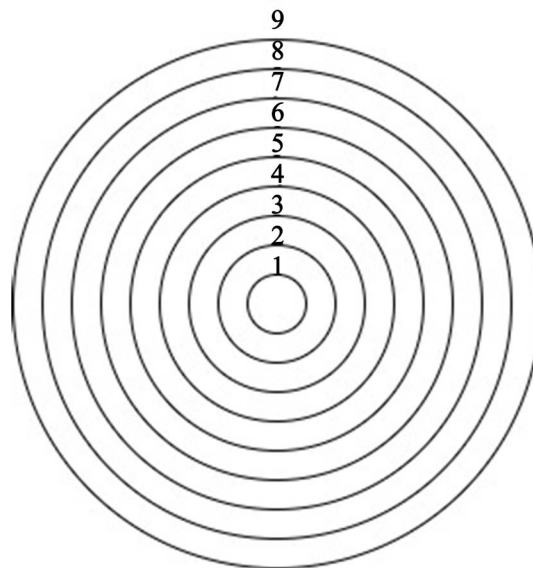
The below is a harmonic series wave that is created from a microwave such as found in the cosmic microwave radiation background wave. A microwave is the only wave that has a wavelength of 1 mm [4]. Exactly what is needed to make the wave shown in **Figure 1**. In order for our system to work, we must start with a perfect harmonic series wave.

The integers of 1, 2, 3, 4, 5, 6, 7, 8, 9 are a harmonic series. Harmonic series.  $H_n = 1/2, 2/3, 3/4, 4/5, 5/6, 6/7, 7/8, 8/9, \dots$

### 4. Entanglement

When two particles are entangled they displayed mirrored characteristics, like Spin and charge even when separated by billions of light-years. This makes them complementary. A change in one particle is instantly mirrored in the other [5].

We simply mirror the pattern as shown in **Figure 1**—0123456789 to 9876543210. The pattern becomes 0123456789876543210.



**Figure 1.** This is the harmonic wave that must be made from a microwave. No other wave dispersion is possible in space as long as no exterior forces are acting upon this wave. The C.M.B. is a Microwave.

This simple method has entangled the pattern of the hydrogen atom we can easily find the hydrogen spectrum.

The pattern  $0.012345678987654321$  inverted =  $1/012345678987654321 = 8.1000000162000000243000000324e-17...$

This is now the spectrum pattern for the hydrogen atom. With one simple division, we have found the harmonic series entangled frequencies of the hydrogen atom.

Notice 81, 162, 243, 324, -6561... are harmonic series still we have not broken the pattern.

This pattern starts with 81 being harmonic series it must extend to 81 squared = 6561.

This 6561 is important because it is the exact measured spectral line from a hydrogen atom.

Bohr, Schrödinger, Heisenberg, and Dirac all came up with methods to calculate the frequencies of the hydrogen atom and in the end, they all came up with almost the exact same measurements as Bohr shown below.

656.1 first Hydrogen spectrum line [1].

The other scientist Measure the first line of the hydrogen spectrum to be 656.1

$$\sqrt{6561} = 81 \quad (1)$$

Equation (1)

With Wave pattern entanglement math as in Equation (1), it is found that  $8.1000000162000000243000000324-6561... =$  Harmonic series entangled hydrogen spectrum  $81^2 = 6561$ . The measured amount is in complete agreement with our simple inverse spectrum solution.

At 81, the system is at a smaller dimension than the larger hydrogen atom at 6561 that they measured but the pattern is still exactly the same.

This is the very point that causality physics drops off. All the same, minds arriving at the same conclusion but without entanglement there system or pattern broke.

Not making the simple inclusion of entanglement into the hydrogen atom structure led to the inability to continue the pattern and led to more complicated non-solutions such as Quantum Mechanics, Particle physics and a thousand other ways to explain the break in the pattern. Simply because, we did not add entanglement into the pattern.

With entanglement, our pattern continues to flow, whereas the static model of the atom with its shells end. They can go no further with it. Using harmonic series wave pattern entanglement math, I can continue to build the hydrogen atom spectrum.

By simply using the entangled pattern we don't actually need math we can just treat the shell numbers, as waves and combine the waves.

U = Union

In **Figure 2**, you find that every column is harmonic series.

In **Figure 2**, we also find that the pattern is still entangled 09 18 36 45 54 63 72 81 90 is mirrored 09-90, 18-81, 36-63, 45-54. This is entangled, and the pattern

0	U	9	=	09		09	U	18	=	1089
1	U	8	=	18		18	U	27	=	2178
2	U	7	=	27		27	U	36	=	3267
3	U	6	=	36		36	U	45	=	4356
4	U	5	=	45		45	U	54	=	5445
5	U	4	=	54		54	U	63	=	6534
6	U	3	=	63		63	U	72	=	7623
7	U	2	=	72		72	U	81	=	8712
8	U	1	=	81		81	U	90	=	9801

**Figure 2.** We see the entanglement and the perfect harmonic series pattern is continued. No math is needed it just a continuation of the pattern.

has not been broken it is still in perfect Harmonic series. In the last column again we find the pattern remains entangled as it is mirrored 1089-9801, 2178-8712, 3267-7623, 4356-6534 until we reach the center of 5445 this center exactly mirrors itself as 54-45.

## 5. It Is Possible to Make a Visual Representation of This Hydrogen Atom Spectrum

The graph in **Figure 3** is made from the calculus form of the Zeta function.

It is a way of combining the Fourier wave transformation approach to the problem of demonstrating infinite solutions in a finite system. The Zeta Function I use is expressed as a sum of sine and cosine waves at different frequencies as sine and cosine are basically harmonic functions. What it does is simply convert the Matrix into frequency domains. It also adds a function of time into the function of frequency. This allows for a force to be calculated that takes the spin into account. This conversion of spatial coordinates do to the special frequency domain provides a spectacular visual representation of the holographic Universe via the animated polar graph.

Following each Dynamic Point as it moves due to the dynamic nature of the system. The graph shows that this point is moving in a straight line.

You can see the animated graph and understand it much better by watching the video on YouTube at this address: <https://youtu.be/rg4tb4ibRYs>.

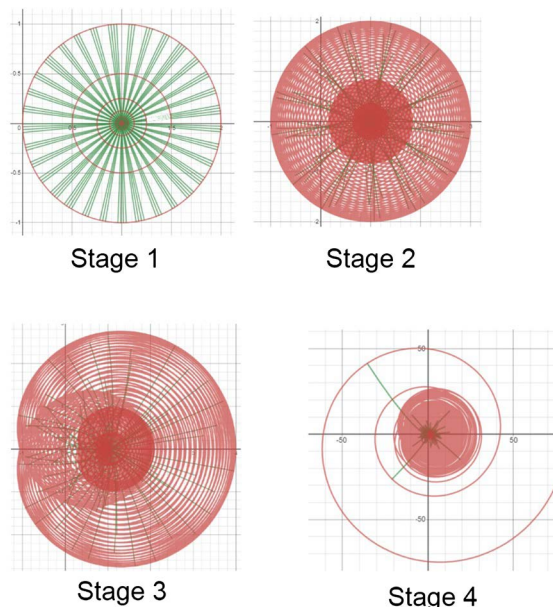
## 6. Stages of Figure 3

**STAGE 1:** Light frequency or rays are passed to the center all arriving at a point less than 1.

**STAGE 2:** The rays are manipulated by the forces into the center of the system and reflected back out into a two-dimensional lotus flower.

**STAGE 3:** The magnetic lines are actually created in what is known as a Langmuir sheath. This type of magnetic field is found in nature from solar flares to the Earth's magnetic field, it's literally everywhere.

**STAGE 4:** We see that spin has now been added to the system and the spiral galaxy pattern appears just as one would need and expect in an accurate model of the universe.



**Figure 3.** This hydrogen atom spectrum does perfectly create a system that mirrors our universe and galaxies. Keep in mind this a continuous animated graph nothing was done other than input the matrix from **Figure 2** into the zeta equation and hit start. The fact that it makes exactly what we would expect to find as a model for universe cannot be coincidence!

This is an internal closed system that was able to build what appears to be a model of the universe without ever adding anything to system as it expanded.

This demonstrates what must come from a harmonic series entangled wave in space nothing else is possible and it is impossible for it not to create a system similar to what I have shown here.

That is quite an amazing result, however, it's not done. In this same animated graph made from one single Matrix, we can enter into the compression zone or the black hole and discover what is happening to the pattern and eventually arrive at the loom or the Creator of this entire system.

By adding in the entanglement I will show that we can simply reduce all the participants in the system not just particles but light, force, energy, spin, acceleration into a single point wave-particle that and graphically display this point.

### 7. LOGOS Nucleus of the Hydrogen Atom-Point Particle

Riemann Zeta Function mapped from  $z = a + bi$ ,  $.0001 < a < 81$ ,  $.1008 < b < 1008$ . The distorted grid lines represent where a grid defined on  $z$  would map to after applying the zeta function in **Figure 4**.

The red circles in **Figure 4** are the entangled hydrogen spectrum starting with  $a = 012345678987654321$

09 18 27 36 45 54 63 72 81 90

1089 2178 3267 4356 5445 6534 7623 8712 9801

The green lines in **Figure 4** are the single frequency of light a photon at the exact measured photon energy level of a microwave at 121 entering into the sys-

tem.

I used the hydrogen spectrum 9, 18 27, 36, 45, 54, 63, 72, 81, 90 in a and the entangled photon energy constant 121 in b to make **Figure 4**.

As we enter into the center mass of **Figure 3** stage 4 and begin to reduce. A mathematical entity or the loom, can clearly be seen spinning these frequencies into a web that expands into the universe.

This entity is no more than the size of a proton but contains incredible energy and forces that are being exerted upon it from the continuum. We find that this entity is based on a harmonic wave as it appears to have nine arms, 9 legs, nine teeth.

$$1/.111111111 = 9$$

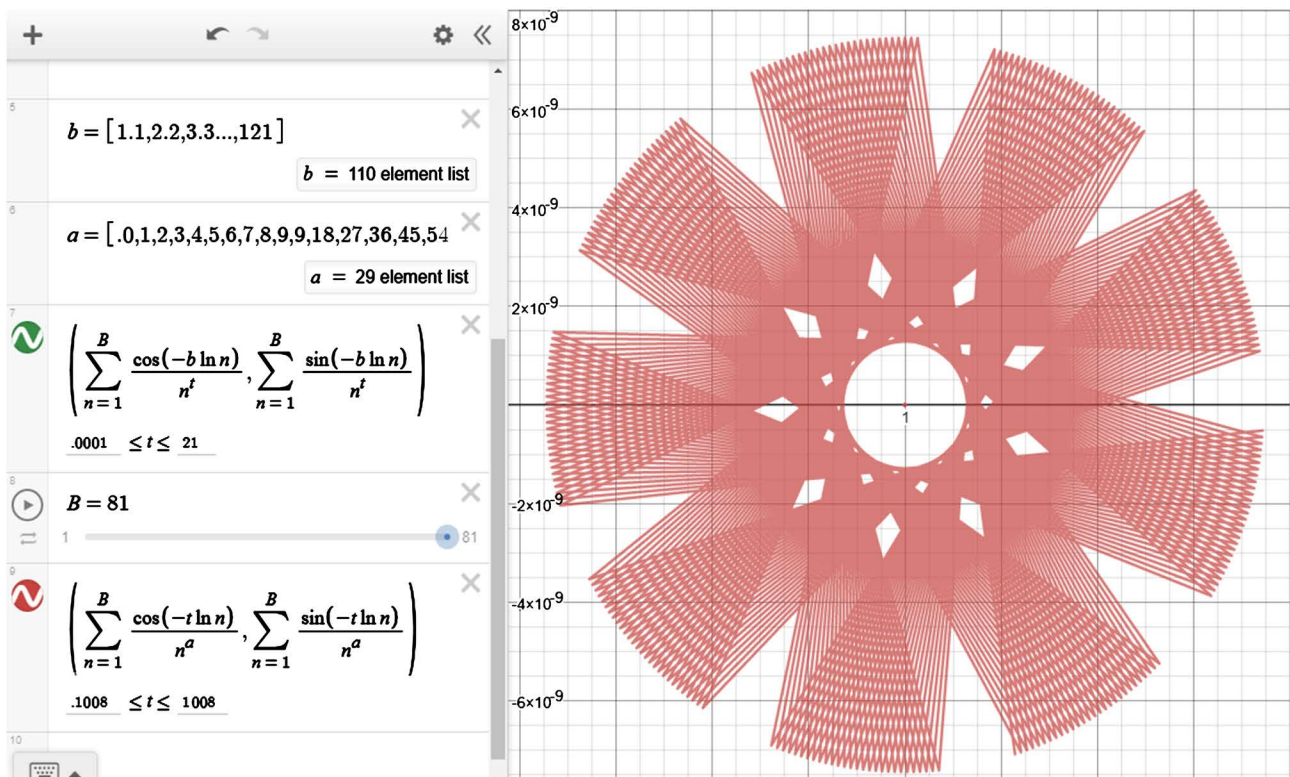
Reminder; all these stages of **Figure 3** and **Figure 4** came from one simple harmonic entangled microwave wave.

From the simplest thing in the universe comes the complexity to create our entire reality.

By graphing the entangled harmonic series wave of the hydrogen atom I have taken complicated system of elements and reduced them to a single point particle with the total mass located in the center of the system.

By moving the external force to the center we now have a closed thermal dynamic system.

This is what happens to a harmonic series entangled wave in space when you reduce it to a point particle.



**Figure 4.** This entity is what is actually found as we reduce the graph down 11 trillion times smaller than Stage 4.

The key element here is that entanglement was introduced into the system at the start. Thus, it is able to continue in the system as entanglement is what created the system. It is still the hydrogen atom!

With new insight into how simply information can be added to the system the following functions can be derived.

## 8. Entangled Action and Reaction

Newton's third law tells us that the action must be equal to the reaction but it does not say it can't be divided up into different parts. The action and reaction can and must be divided up into a minimum of three parts to create a three-dimensional reality. The sum of those parts will equal the total action or at least mirror exactly the total action.

Newton's third law is two-dimensional, it describes a flat wave that will expand and compress its center in two-dimensional space and meet his requirements.

We live in three-dimensional space so there must be another dimension in the action and reaction and there is the space between the two poles is now charged and that space has energy, force, velocity, mass, spin and now that space between the points is pure potential having everything needed to create anything we can imagine.

Now finally we can calculate this entangled space because we know that everything between these two poles has to be entangled. The energy has to be propagating at the same rate as the force! Spin, velocity mass all must be propagating completely dependent upon the other elements in this continuum.

We can now know that this difference between the action and reaction has a numerical value and can be obtained as demonstrated in Equation (2).

$$\frac{\text{action}}{\frac{1}{\text{action}}} = \text{entangled reaction} \quad (2)$$

Equation (2)

## 9. Complementarity

Equation (2) demonstrates that Complementarity is more fundamental than relativity, which takes the speed of light as an absolute limit. This means that entanglement is more fundamental than the four basic forces in nature [6].

The coexistence of opposites is called complementary. In any situation in which opposites exist, one can replace the other in specific circumstances, and at the same time maintain aspects such as negative and positive charge, spin, energy, and momentum that are completely dependent upon the other. Any change in one will result in a change of all participants in this entangled continuum.

Einstein's theory of relativity 1905 is a deduction from the observed pattern of events.

It is causality.





tarity have been violated, and we now have a universal velocity of light =  $c^2$ .

Light cannot simply be moving in one direction without the opposing reaction. All participants and elements in our universe must abide by the same Laws.

This is extremely important for the first time we have an explanation for the speed of light squared. Instead of just using it because it works. Entanglement demonstrates exactly how  $c^2$  exist without violating any of the laws of physics.

Furthermore the entangled Velocity of light gives us the hydrogen atom!

Equation (4)

$$1 \div \left( \frac{c^2}{\frac{1}{c^2}} \right) = 1234567901 \tag{4}$$

The velocity is propagating perfectly in Harmonic Series entangled hydrogen microwave wave as demonstrated by Equation (4).

Thus, if we find the square root of our initial entangled wave Equation (5)

$$\sqrt{.012345678987654321} = 0.111111111 \tag{5}$$

$$0.111111111 \times c^2 = 0.012345678987654321$$

$$\text{Inverted } 1/12345678987654321 = 81.000000162000000243000000324$$

Equation (5) has produced effortlessly the Hydrogen spectrum.

We know that a microwave creates the wave pattern of 0123456789 we know the CMB is a microwave thus the wave pattern of a microwave when square rooted = 0.11111111.

This most basic wave 0.11111111 squared = 012345678987654321 = The entangled CMB wave that makes the hydrogen atom.

This entangled system allows for further simple calculation of entangled energy. We have now discovered one constant, “the universal velocity of light”.

### 11. Entangled CMB Constant

We will need to discover at least one more constant and combine them together to see if they do indeed form a continuum and create the energy needed in perfect harmonic series.

We have the velocity of light and the only other thing we can say with any certainty that we have to start the universe with is the CMB.

The CMB is measured at 2.73 degrees kelvin

We are going to simply extend the 2.73 to the more accurate

$$2.7272727272727272727272727272727 = \text{Action}$$

This is important when dealing with the quantum world that we don't use exponents. Now we apply

$$\frac{\text{action}}{\frac{1}{\text{action}}} = \text{entangled reaction}$$

Equation (2)







**Figure 6** is the most amazing part in the history of mathematics.

Now again I will combine this new 3-dimensional constant with our entangled velocity of light.

$$0.1344444444713333333373666666672 \times C^2 = 12,100,000,002.420000000363000000048$$

The answer gives us the universal entangled energy but in a perfect harmonic series dispersion pattern.

121/242 = 1/2, 242/363 = 2/3, 363/486 = 3/4 you see it is still a perfect harmonic series 1/2, 2/3, 3/4, 4/5, 5/6, 6/7... to infinity.

Now we ask does this dispersion pattern of the energy match our wave pattern of the hydrogen atom.

$$12100000002.420000000363000000048 \times c^2 = 1,089,000,000,217,800,000,032.67000000435600000054450000006534000000762300000087120000009801$$

1089-9801, 2178-8712, 3267-7623, 4356-6534 until we reach the center of 5445 this center exactly mirrors itself as 54-45.

Do you remember this wave dispersion pattern from above? It is the hydrogen atom spectrum as calculated above. This demonstrates that our universal energy is indeed in the continuum of the wave and all our in perfect harmonic entangled coherent symmetry.

We added coherence to the system and in so doing we calculated the exact entangled energy dispersion pattern to infinity.

This same exact system will work for any member of the continuum.

Example. Using the 10 digit coherence rule.

$$\text{Inverting } c^2 = 1.11111111111111111111111111111111e-11$$

We want coherence so we will use only 10 digits.

$$0.111111111 \times c^2 = 0.012345678987654321$$

$$\text{Inverted} = 1/12345678987654321 = 81.000000162000000243000000324$$

The Hydrogen spectrum. In perfect harmonic series.

We see that our universal velocity is in this same exact pattern of the hydrogen atom as well and is a perfect fit into the continuum.

We know that a microwave creates the wave pattern of 0123456789 we know the CMB is a microwave thus the wave pattern of a microwave when square rooted = 0.11111111.

This most basic wave 0.11111111 squared = 012345678987654321 = The entangled CMB wave that makes the hydrogen atom.

This entangled system allows for further simple calculation of entangled energy.

Now we add spin into the continuum.

$$1 / \left( \frac{2.727272727}{1} \right) = 0.1344444444713333333373666666672$$

**Figure 6.** Notice the difference in the answer we now have three complete constants in the answer.

## 15. Spin

We know that spin exists. As a matter of fact, pretty much everything is spinning. We know that all particles spin. We know that for every action there is an equal and opposite reaction. Thus, if a wave is spinning in one direction the center or inverse of the wave must be spinning in the opposite direction. This sounds a bit impossible. However, it is called reactive centripetal = (0.6666666666) and centrifugal forces = (0.1666666666). To date, this force is largely ignored but as WPEM will demonstrate not only is it the main force of the universe it is entangled and it fits perfectly into the same wave system of 0123456789 and never breaks the pattern and create the gravitational constant of 9801.

$$1/0.1111111111 = 9$$

$$0.1111111111 \times c^2 = 12345678987654321$$

Inverted  $1/12345678987654321 =$  The Entangled Hydrogen shells.

$8.1000000162000000243000000324e-17$

The Entangled Harmonic Hydrogen Spectrum. Applying the Trinity system we can find the two, pole constants and find the spin Constant.

$$0.6666666666/1/0.6666666666 = 0.444444444444$$

$$0.1666666666/1/0.1666666666 = 0.0277777777$$

We can now combine these two entangled constants.

$$0.0277777777 \times 4444444444 = 0.012345679 \text{ the same hydrogen atom}$$

## 16. Conclusions

It is found that all elements needed to form the entire universe were present in the tiny primordial wave that created the universe, and they were all present in the simple pattern of 0123456789. They were all present in the simple pattern of 0123456789. This is why we find these qualities in our math. They were there at the very start. By reducing the pattern down the very start we can easily find these phenomena in the pattern, continue the work of our great scientists and find the universal field theory of wave pattern entangled math.

With the inclusion of entanglement, the universe unfolds perfectly, and we finally have an all encompassing unified theory.

This discovery suggests that relativity is not the most fundamental aspect of the universe and the speed of light cannot be the limiting factor that we think it is. Allowing us to go deeper than the laws of Causality and breaking entanglement down to its most fundamental level, we find that Complementarity is the only way for physics to advance; it becomes the fundamental basis for reality. And that relativity is just one of many participants in the continuum created from complementary interaction.

## Declaration of Interest Statement

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential con-

flict of interest.

## References

- [1] Physics Course Book, Experiment 21, Spectrum of Hydrogen and Rydberg Constant. <http://personal.tcu.edu/ystrzhemechn/Classes/2010/Summer/Labs/lab21.pdf>
- [2] Experts, D. (2019) Guide to English & Logical Reasoning for BITSAT with Past 6 Year Solved Papers. 8th Edition, Disha Publications.
- [3] Quantum. The New Quantum Mechanics of Heisenberg, Schrödinger, and Dirac. <https://science.jrank.org/pages/10933/Quantum-New-Quantum-Mechanics-Heisenberg-Schrödinger-Dirac.html>
- [4] Electromagnetic Spectrum. <https://web.pa.msu.edu/courses/2000fall/phy232/lectures/emwaves/spectrum.html>
- [5] Deepak Chopra, M. and Kafatos, M.C. (2017) You Are the Universe, Discovering Your Cosmic Self and Why It Matters. Harmony Books, New York, 239.
- [6] Curium, P.J. (2017) Information at the Center of Creation. In: Traditions, I., *et al.*, Eds., *The Cosmic Hologram*, Inner Traditions, Rochester, VT, 18.
- [7] Revision History Statistics, Bibliographic Details for “Conservation of Mass” (February 2020). [https://en.wikipedia.org/w/index.php?title=Conservation\\_of\\_mass&oldid=938766419](https://en.wikipedia.org/w/index.php?title=Conservation_of_mass&oldid=938766419)
- [8] Wikipedia, The Free Encyclopedia (2019) Invariant (Physics).
- [9] Wikipedia, The Free Encyclopedia (2020) Conservation of Energy.