This document has information about quantum mechanics and it might be difficult for some to follow. I believe within this document along with Fennsmash(v?) is the information needed to complete the theory/story of everything and all the Math Physics has been waiting for, for roughly 300,000 years. It was never going to be done with Math, we've always needed (storytellers) to (communicate), and (scientists) to (tell us what) to communicate. Nature comes first. Then the story. Then the science. Then understanding/truth. Until we get the story right, we cannot get the science right.

I do my best to equate concepts to computers, which do an excellent job of providing context, but I had to make a few names up. I am not a Physicist. I approximated the Physics here based on self-study and PBS Space Time episodes with Matt O'Dowd. I reached as far into science as I could, but I am a Storyteller/Poet; someone needs to finish the rest, that's how cycles work. In all sincerity, this might be a lot to process for some people. Thank you for reading.

Key points:

1. Previously considered analytical models of the double slit experiment (aka the Copenhagen Interpretation) incorporated a linear chain of events: particle gun=>double slit=>screen=>machine measurement=>machine display/computer=>human observation
2. This theory is a new iteration of the same concept of thought, that views the interaction between quantum and non-quantum as a cycle, completed by a loop of time, and **not** a linear path, as in previous [erroneous/not-working] linear models. (Diagram added at the bottom)
3. This successfully removes the paradox of a friend measuring, and then involving another friend far away.
4. In doing this, we also save Schrodinger's cat.
5. <u>The link between (measurement/experience/reality) is not found between particle gun and brain, it is the loop of time connecting the system. If the action of a particle is (measured/observed/experienced) EVER by a living being, there exists a complete (loop/chain/cycle) of events, and the particle is removed from the quantum world and 'changed' into a particle, no matter how far in the future the time loop is completed.</u>

If the above can be accepted as possible, below is my theory of everything. In between, is only time.

Here goes:

It starts with the defining the distinction between body and mind. Really isolating what each one is, giving *each* the *context* we need in order to start thinking about what's *more*:

1. Our bodies exist in the non-quantum world of matter (common sense; we see/hear/touch = we experience things)
2. There's really 2 things we do, we collect information from the world around us with sensory organs, and we process this data in our brains. Talking to other people is sounds, sights, touching; some of the many amazing things we can sense by interacting with each other.
3. Our sensory organs (eyes, ears, nose, tongue, skin) are *constantly* collecting data from the world around us, whether we choose to *notice* or not. Like not paying attention to the tv, or your teacher, or your partner. You're just not paying attention to the sound input (we're human, we can't hear ALL the sounds and see ALL the things at the same time!)
4. So, our brain is the amazing thing that helps us experience all of this. The information from outside hits our sensory organs, and then shoots/travels up to our brain.

5. Our brain is incredible. We don't fully understand it. Science has gotten a TON of [I think] fascinating answers, but not all of them. Like, sleep? We'd all really like to know why all living creatures need sleep, but only the ones with brains, wouldn't we? What's the big difference between us and bacteria in soil? What we do know, is our brain collects, sorts, and processes information or better said as "data.

This concept is the first critical element: Defining our bodies. Everything from our eyes, ears, nose, mouth, and skin is all non-quantum and we have a good idea how this stuff works. We even have a *ton* of amazing medicines because of science. Everything in our brains from structures, to neurons, to neurotransmitters, everything we study in biochemistry and biological processes, it all can be considered "hardware". Its function is to collect, process, and store data. This isn't romantic, but it's the science we already know with a different name, hardware. It's easy context.

What interested me was: Sometimes I notice a sound that I know has been going on for a while, but I know I'm just becoming aware of it. Our brains aren't able to hear all sounds at once, but if we want to, and we close our eyes, and focus (as in many meditations), we are able to *notice* sounds we didn't *notice* before. If the "data" from all sounds around us exists in a wave form before it comes anywhere near our body, what is happening to sounds we don't notice? What happens that is *different* in the sounds we do notice? *Something* IS different. We haven't completely figured this out in the biology or biochemistry or neurology fields, because the answer is quantum. The question is: **What does it mean to *experience*?**

I hope you love how close Shakespeare was as much as I do. "To be, or not to be, that is the question." Maybe he helped spark my thought wheels, and if you think about it, they're different forms of the same question, so, Will told us what *the* question was a long time ago I'm just one person taking the time to give him a great answer. 'What does it mean to experience' (and to be or not to be) is my ultimate question.

It isn't a straight path to the finish line, but with all my nerd power I went deeper and deeper, cycle inside of bigger cycle, until one of them took me into a black hole (I'm in there now, help!).

Onto more science! I love science SO much!! You don't have to though, I can love it for the both of us while I tell you about it:

We know from our science labs how waves and particles work. Data travels around in waves (like sounds). There's also things like molecule-sized smells. Those aren't the same, and we're not talking about them for now. We have been studying this wave and particle stuff (particle physics/quantum mechanics) for a long time, and we've learned a lot about the particles traveling around as waves. The whole reason I started liking the quantum world was because I watched Captain Quantum's double slit experiment. If you don't know what it is, oh my goodness it is the most mind-blowing science experiment ever. It's all over YouTube too, and it is absolutely proven science so I'm not stepping into any weird areas yet.

The consolidated version is: when scientists study waves, they can see their effect. For example, the effects of shooting a laser at something and burning a hole in it (how cool are lasers!). Anyway, so what's weird, is the second they try to get a look at the actual wave itself, it magically turns into a particle. And that's a really weird magic trick, but if they just look at it and it looks different from what they thought then no big deal. What is mind-blowing about it is, it doesn't just look different, it *does*

different things. It would be like if you were a boy when I looked at you and then you turned into a girl when I wasn't looking at you. I am NOT exaggerating or kidding in any way, this is a very good analogy for what happens in actual science labs and has been for 50ish+ years.

Every time, without question, when we directly measure a wave, look at it, observe it in ANY way in science labs, 100% of the time it changes from a boy into a girl. I'm kidding obviously, but it does totally change its behavior. I have to trust you get this, otherwise I will go on and on. That is SO (crazy/cool) to me. Just looking at something literally changes not only how it looks but how it acts in actual science. I will fail at writing out a cool example, but go online and look for a video, it is so cool.

But why do we think this just happen in science labs? I don't think it does at all, and it makes perfect sense to me that it doesn't. 'Measuring machines' aren't special, *we* are special. When we as human beings become *aware* of a sound, in that exact instant, the wave has been *observed*, just like in science labs, and it is *removed* from the quantum world. What happens to sounds we don't become aware of? Nothing. They stay in the quantum world as waves. We don't need machines at all to make this cycle work, why on Earth would we?

So what happens now that we have seen a sight or heard a sound or smelled a smell? What then? The answer: It travels to our brains (not 100% sure how, but electric signals make the most sense to me) gets stored in our brains, and ultimately released back into the quantum world – **via brain waves**. Especially at night, we are actively converting non-quantum data (the data we removed from the quantum world) back into quantum data.

"But can we get some natural language definitions to clarify what you are attempting to communicate to us?"

My heart just melted. It would be my pleasure. Did you know I also love charts? Let's keep a running chart, just for: ~continuous~ context! Is it Math, is it language I don't know anymore I guess it's all the same.

Context chart 4 People	
Human Language/our reality	Natural Language/Nature's reality
data	information
Particle	wave

So as you might notice, not only do we have our first definition, we already have our first unanswered HUGE science answer! We figured out sleep before we even got to gravity. Sleep (lots of brain wave things happening) is our hardware (brain) converting non-quantum data back into quantum data. **The human brain is a quantum computer.** Creative people, many geniuses, who think in a more "quantum" state during the day, store and process data differently. All people can think in the "quantum state", some just do it more often. They seem scatterbrained, loopy, 'out of touch with reality' they have less need for sleep because they have not collected as much non-quantum data throughout the day, and therefore need less time converting it at night. Many people are forcing themselves to stick to an unnecessary sleep routine. (Waking up on time for work) > (going to bed on time). What's most "natural" would be going to sleep when tired

Context chart 4 People

Human Language/our reality	Natural Language/Nature's reality
data	information
Particle	wave
Sleep 8 hours for everybody	Sleep when tired, wake with sunlight

So what is the relationship between our hardware, this 'quantum computer', its inputs, and the quantum world? This is the second and most major concept: **the quantum world and the non-quantum world (the two components that together make us *alive*) act not as one thing, because they are not one thing - but two separate *entities* in a cyclical, symbiotic relationship**. Our hardware collects, stores, and processes data in our brains, and converts it back into quantum data, into what I will call for now 'the essence field' (defined later in this paper). But what would the point be? There is no overall change in the universe after a cycle of data being "reformatted" from wave to particle and back again.

This is where it gets fun. I will now address a possible answer for universal expansion, dark matter, gravity, and everything will cascade from there, while remaining true to what (we/I) know of science. Hold on to your seats. The universe is expanding, what could that be? Creating something out of nothing is the easy explanation, but in physics we can't do that. Matter can neither be created nor destroyed, right? That's kind of a big thing in physics, right? Now I'm having fun with you – because both things DO happen. You heard it right. We are not just converting particles into waves and then back again. If we did that, there's nothing being added to the sum. What's missing? What's missing is the answer to all of the problems in Physics right now, read it a few times if you have to:

The ***experience*** of ***experiencing*** this process happen also occurs. In and of itself, this ***experience-experience*** becomes ***new*** quantum data, that came from ***nothing*** in the quantum OR physical world. This ***experience particle*** is my explanation for dark matter; an unseen quantum data particle. It is a ***cosmic byproduct*** of our quantum brains ***experiencing*** the cycle of processing non-quantum information.

So now 1,000 things come up: If this is true, then, what is space time, what is gravity, where and how is this data stored? Those are some of the many questions that went racing through my mind, and I am going to answer here. I don't know exactly where to start but I'll go with the concept of **gravity** (this won't be short).

The way to answer this is still in computer terms. So we have our quantum computer, doing all this processing, and creating this brand new "unobservable-dark-matter-experience particle" (maybe I can name it after my Mom?) but what happens to the original wave's data? If we create these new "essence particles" by experiencing an already existing input of data, and think the overall sum is greater than the input, we need to explain a way for both to come out. One of the key elements in Physics is a gravity particle, we are pretty sure it exists, but we haven't seen it and don't really understand it at all. Why make more work for ourselves – there's a particle science doesn't understand, and a particle we have an understanding of, but no name. The second byproduct of quantum computing is the ***graviton*** particle. It could be changed somehow, or remain unchanged. Either answer is OK for this theory to "work".

As I said, nature is cyclical. We little humans aren't making enough data to shake up the cosmos, so what else is there? Well, this cycle of being awake & experiencing & creating new non-quantum data from nothing, and then sleeping & reformatting non-quantum data into (gravitons + "essence particles"/dark matter), occurs in *all* beings who follow this cycle. This cycle is happening right now, on Earth, all day, every day, and everywhere in the universe, and it has been for all of time. (Or, at least since life with

brains sprang up. I do have other rabbit holes to publish after this). NOW we are talking MASSIVE amounts of data on a cosmic scale. This is still only half of the picture – maybe ¼.

We still need to know:

1. What happens with the data once it's released in brain waves?
2. Where in space time is it going?
3. What are the properties of these particles?

There's a LOT more to ask, but to get back to gravity, let's ask this: what would need to happen in the quantum world, in order for this to be a complete cycle?

1. Data – both in the form of gravitons AND essence particle – would have to exist, or, be *stored* in some way.
2. Essence particles seem to be the sought-after reward (new data), so nature would want to keep them *safe*
3. So, gravitons are either another type of *less wanted* already experienced data, OR they are *blank data* in quantum form. Either way, they seem less desirable to nature (though still important) than "essence particles"
4. Gravitons need a more clearly defined role. What are some things we know about gravity(?):
    a. It interacts with non-quantum matter/particles
    b. Matter can resist it easily, as in the example of a butterfly flying
    c. In massive amounts, it is wildly powerful, and it can collapse stars into black holes
    d. It seems to exist in a field
    e. It is somehow a carrier of data
    f. Gravitational waves travel at the speed of light, warping and stretching everything in space time, as if it were a fabric (speed of light will need to be constant for our theory to work; it is constant, which is apparently at-odds with much of modern Physics)

This brings us to my first round of *__probable__* conclusions about gravity and the formation of the universe (I am open to edits here, as I said I thought this out based on Matt's Space Time episodes, but I think this works well to (address/unite) many concepts we *__do__* know to be true):

- Gravitons exist in space in wave form. They are "moving" at the speed of light. Since they are in wave form, they are not constrained by the same laws as matter, so while we might say they are "moving" at the speed of light, they are not – they are simply *existing* at the speed of light
- Gravitons interact directly with matter, while they are in wave form
- Matter is not attracted to itself, BUT the graviton field's general tendency (I'm not calling it a gravity field for a reason) is to behave as if individual gravitons are attracted to *each other*. Since gravitons as waves are not matter, and matter exists within its field, this results in a general tendency to behave like the displacement of water around a basketball – but NOT exactly the same.
- Gravity will squeeze into the ball. Except there's a lot more going on in the quantum world than just that. Gravitons don't eventually come to rest like water would a few minutes after you dunk the basketball (though in theory, the universe is probably approaching this state of homeostasis, and it would take a few trillion$^{\text{trillion}}$ years). A large mass of matter creates a void that increases the intensity of the "flow" of gravity around it, towards its center. It has disturbed the homeostasis of "a-general-tendency-to-behave-as-if-they-are-attracted-to-each-other-even-though-they-are-waves" by inserting itself between gravitons. In the case of stars, how many particles can you fit inside the volume of a star? That's how many gravitons a star has come between.

- Since the big bang, gravitons have 'flowed' in this manner (for billions of years). When the first tiny pieces of matter touched each other, the "graviton field" around the objects increased its flow towards the center of the 2 objects very slightly. Just enough for some of them to stick together long enough to bump into a third piece of matter. Then a 4th.
- As the masses got bigger, so too did the inward force of the gravitons around them (towards their center). Large objects continued getting larger, and stars and planets were formed.
- [It might be the case that there has to be at least 2 particles for there to be any disturbance. 1 particle could be what theoretical "homeostasis" is like, OR all matter including individual particles might cause a tiny disturbance. It will absolutely change the math, but I don't know how. Since it's a binary variable, I think that means it will be easy to plug in numbers.]
- Around each large object is an "area of gravitational influence" but it is not a "gravitational field" per se. It is actually just a function of how much the object is disturbing the general tendency of gravitons to act as if they are attracted to themselves; we can call it the "essence current".
- The disturbance should appear a bit like a ring, and the outer area of the ring at the point where the gravitational field is no longer disturbed by the object, would be the limit of the object's influence on gravity. So whatever is around a large mass is more appropriately called a "ring of graviton [or gravitational] disturbance". "Gravity" that pulls us back down to earth when we jump, <u>is actually us jumping into a relatively powerful downward stream of "essence/gravity" current!</u>
- Outside of any "rings of graviton disturbance", gravitons are "flowing" more freely (but really just existing), NOT exactly in a mathematical homeostasis, but in a function that is approaching homeostasis outside of other disturbances, and still with a general tendency to behave as if gravitons are attracted to each other.
- Whenever 2 large moving bodies of matter have an overlap in their ring of graviton disturbance, the gravitational force directly between them becomes 'neutral' [or in some way less than what is on the other side]. Since the force of homeostasis on the opposite sides of each body is greater than a neutral zero, those two bodies would move towards the neutral area between each other (not necessarily even really to 'each other').
    - *This one is pretty close, but I need to think out the 'neutral' part, there might be a slight difference here you can help me with. Also, there might be something different in the way gravitons interact with matter, vs when they are not interacting with matter, thereby creating attraction in some other (additional AND/OR different) way.
- If their momentum is strong enough, after their trajectory has altered slightly, they would continue in their new trajectory, but their momentum would decrease proportionate to the amount of energy required to overcome the relative attraction to the proposed 'neutral zone'.
- If many large objects across the universe were doing this, over time, a spiral effect would occur, contributing to the formation of a spiral galaxy. Theoretically a galaxy could form and ultimately momentum could overpower the force of gravity and it would come apart, but more likely most (if not all) galaxies are EITHER around today because they have reached a homeostasis (like a solar system) OR some, or all, are in a state of implosion (ultimately leading to supermassive black holes). If measurements are available, there should be a proportional relationship between galaxies and supermassive black holes, and stars and normal black holes (whatever that is). Though, since galaxies don't have any standardized mass, there might not be a discernable point where you could say "OK this was a galaxy" and not "this was a swirling cluster of stars". But, a full galactic black hole, now that would be something!

- Gravitons and “essence particles” (dark matter) are both quantum particles of data that coexist in the same field. The “essence field” is both the gravitational field AND the dark matter field (they are not distinct, and neither exists)
- I call this field the ***essence field***
- The essence field is ***quantum memory***, the ***storage*** area for quantum data. I think this is the same as saying space-time is this field of “quantum essence memory”, and most likely shakes things up or in total eliminates the current concept of “space-time”.

That was a lot to take in.
Yet, we must go on! Into the cosmos!

It brings us to the next round of questions:

- What would the properties of memory be in this context?
- What are its limitations?
- Does it delete anything?
- HOW would it delete something?
- WHY would it delete something?

And it’s even more to take in. So, I start by thinking of deletion. When you delete data – it just disappears. But physics today says that’s impossible, nothing can be zapped out of existence. And here’s the rub. We were told matter can neither be created nor destroyed. We’ve shown that it can be created in this cyclical model-we theorized a cycle. And here, just as we are trying to wrap up the full cycle, still needing to reconcile the creation of something from nothing - one of the last remaining frontiers, black holes, **for the first time ever**, have come to save the day in a Physics problem. Please at least give me credit for making black holes the good guy for once. [post] Modern Physics says black holes are impossible, because matter is sucked into a vacuum of nothingness and zapped out of existence. Again, I don’t have the math, but this is the cycle, and I actually can keep showing that it makes sense with a little help from the math someone else named Planck already found out!

This has gotten us to, ok, so, how would the universe efficiently run this cycle of deletion? What would make the most sense? What is the framework to approach this from?

- We want ‘essence particles’ to be *safe*
- We care less about gravitons
- Both exist and have a role

Given our assumption that black holes are a part of a universe-spanning cyclical natural process, and they are the deletion of data, HOW would this ‘essence field of memory’ initiate the deletion process in the first place? Answer: The deletion process is just always happening. Deletion is part of the cycle, and it is the cycle that causes the deletion.

Here’s what we know (AND/OR can reasonably postulate) that is relevant now:

- Less desirable gravitons, acting as waves, behave with a general tendency to be attracted to each other, while essence particles (as waves) demonstrate no tendency towards anything (I haven’t thought deeply this part yet, but so far, not relevant. Maybe they are attracted to nothing, maybe to themselves, maybe just away from gravitons, we don’t need to know that yet.)
- Memory, as in the form of computer storage, should have a limit, or a ***threshold***

- To *__exceed__* the “quantum memory threshold” would be *__catastrophic__*
- Any given volume of space, small or large, will be able to hold a finite amount of data. This will be called “essence memory threshold”

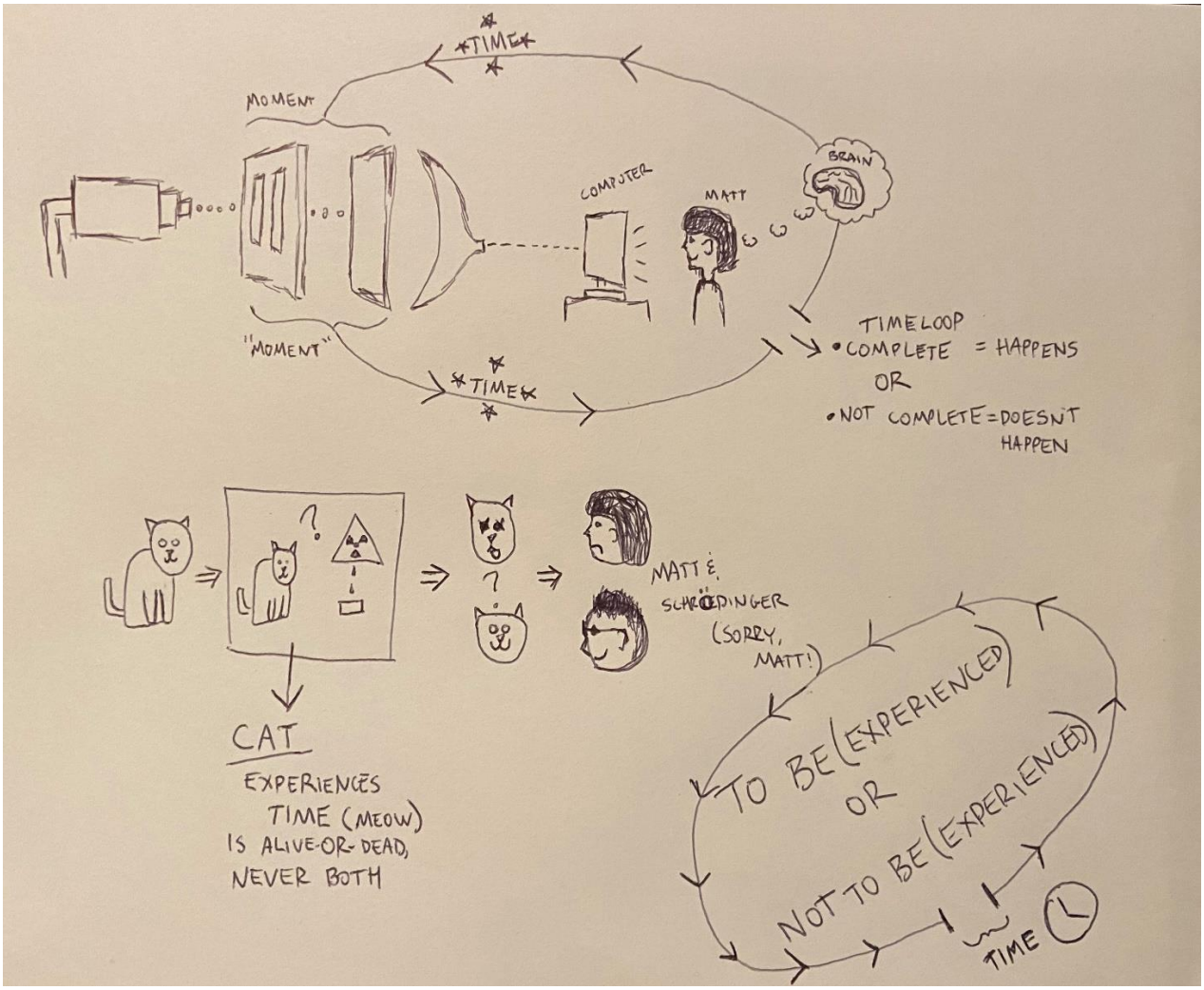
And this is how we have solved the problem of gravity, gravitons, black holes, dark matter, dark field, etc. I believe the math has already been done – the essence field memory threshold will be a function of **Planck Scale and/or Planck Time.**

- When we try to measure something smaller than a Planck length, the energy of measuring/interacting with this space will cause it to exceed the “essence memory threshold”
- This results in deletion, or, a black hole. I believe the math to prove this already exists as well
- I call the smallest unit of memory, Planck-Leo memory
- This event only happens in *__nature__* when a large amount of data is gathered in one space, and an incredible, universe-ripping amount of force squeezes it so hard it occupies an amount of space that cannot contain it. It exceeds the “essence memory threshold” and is deleted.
- This deletion, what happens in a black hole, I call *__Fennsmash__*
- I have written a logical mathematical construct in which I derived the shape of the universe we experience should be part of a looping system of universes.
- I identified 4 universes in this system, which could loop in 4 OR extend into infinity.
- I believe imaginary numbers, in Math, the ones that cycle in a system of 4, coincide with my Mathematical construct and can be identified as Mathematical expressions of 4 universes.
- Anything outside of this fully linked loop of universes – would be considered a second dimension.
- This would mean mathematically we live in ONE dimension. We won’t turn into pancakes, but this turns all of Math on its head – Math assumes 3 dimensions.
- It is good to turn Math on its head; we have 7 unsolvable Millennium Math problems this would resolve given the refutation of the 3-dimensional system of Math.
- It also resolves all the observable Physics. Black holes, when viewed as being on the outside of a looping system of 4 universes, would simply eject excess matter into the “external” dimension.

This is the Quantum Cycle, a working theory of everything, and all living beings are a beautiful part of it. Oh, yeah. The speed of light – it works in as the speed of thought. It is the only way to ‘exist’ in the quantum world, and must be constant. I have more work to do, but felt this should be complete enough for the eager minds of Physicists to chomp on. I cannot include my current theories on time because they are incomplete.

- It has taken me about 4 days to get this together. I am either dreadfully wrong, or if anything, unabashedly amazed at my own creativity in making this up. This is a LOT for someone self-taught to just write down in a flow of consciousness, right? Should I start taking Math classes or just write a Sci-fi book?
    - If you like this even as a neat story – I’d welcome you to share it!!
    - Email me questions, comments, concerns: **michaelleoemerson@outlook.com**

Thank you for reading this!!
Next page: Excellent drawing. Save cat.


TIME
MOMENT
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"MOMENT"
TIME
TIMELOOP
• COMPLETE = HAPPENS
OR
• NOT COMPLETE = DOESN'T HAPPEN
MATT & SCHRÖDINGER (SORRY, MATT!)
CAT
EXPERIENCES TIME (MEOW)
IS ALIVE-OR-DEAD, NEVER BOTH
TO BE (EXPERIENCED)
OR
NOT TO BE (EXPERIENCED)
TIME