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\#8
Formal talk-0623102006 Morning day 4
Lila recording day 3, morning
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1 Hr 40 min
Recording 8
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## Check formula 9:00

Find appropriate graph at * 1:07:11
B: last session, about whether this is $\mathrm{p}(\mathrm{pi})$ over $2 \mathrm{n}[\pi / 2 \mathrm{n}]$ or not. And now I checked and it is p (pi) halved multiplied by $\mathrm{n}[(\pi / 2) \mathrm{n}]$. It was in the denominator somewhere.

Y: I remember you asked.
B: Yes, I asked and then I checked today in Baker's writings and it is $\mathrm{p}(\mathrm{pi})$ halved multiplied by n . But now I should find it.
:38
Y: That last number was it... What did you use for the input numbers for $E$ and pi?
Bret: I used the values calculated up here. I named them pi 28, and E 28.
Y: (acknowledge)
Bret: And then recycled them into the formula to make sure to use those numbers.
Y: Well it didn't stop at 23.
1:01
Bret: No.
Y: Ok l'll have to think about that. That's important to know that's the case. Whose pen is this? Nobody claims it, it must be Namrata's.

Darshana: Or Sati's.

Y: Or Sati's they both put things down and forget them. Ok you can turn it on.
1:31
Before we go into the details I want to work on our project of getting the overall picture. And before we carry on into quantum theory and into biological forms I want to talk to you about something I mentioned yesterday which is fine-tuning. This is one of the great problems (in) science today, they can't figure out how it could possibly be that by change the world has come out to be exactly this way and not some other way. Especially one that is so convenient for life.
2:20
To give you some background on this because l'll throw in Lila comments along with this. This is from a book by Martin Rees. Martin Rees the astronomer Royal of England on fine-tuning. And these are the highlights. It says here, he said, "If gravity were stronger than it is, the sun's core would burn brighter and not last long enough to evolve life." So gravity has to be very weak. How do you get gravity to be so
weak? Well, the Lila Paradigm explains that. Well read another one here. "If the nuclear forces were slightly weaker (that is the nuclear forces are the strong force and the electro-magnetic mostly the strong force and the weak force) no chemical elements other that hydrogen would be stable. And there would be no nuclear energy to power stars. But if they were...
3:48
If the nuclear forces were slightly stronger than they are relative to the electric forces, two protons could stick together so readily that ordinary hydrogen would not exist. And stars would evolve quite differently than the way they do." So those forces, the strong force and the weak force have to be just what they are, if a little more/stronger a little weaker we would have an entirely other picture. 4:25
And let me permit myself a comment, it wouldn't be any fun. In the Lila Paradigm Lila... One of its translations is the play of the Gods. That it's play. For the Gods it is play. For us it's a struggle. But we are really the Gods underneath it all. So who made it be this way? The Gods, as we truly are, have made various choices so that the nuclear force, the strong force, and the weak force and the electromagnetic force have the values that they do.
5:23
But this is not entirely true, it is partly true. Some things can be adjusted, forces, light (we'll read some more) within certain parameters it's adjustable. Like the electric charge is very adjustable because it's determined by how many arrows, are going across. So we can take arrows away, we can put in more, we can adjust Alpha, we can adjust the strength of the charge quite a bit.
6:00
But there are some things that can't change because they are determined by the limitations that I have written down that constrain the Lila Paradigm. Like you can't choose to be in a state of knowledge of someone who doesn't exist. You can only choose to be in a state of knowledge of someone that does. Well that is an obvious statement but it is a constraint. That is a limitation and even if you accept everyone, even if you do that only that many.
6:40
What if you wanted something to be much stronger than that and make the Alpha be much stronger, you couldn't do it. The most you can do is accept everyone. And that would just be you. Well, what if you talked everyone into it? Well, still it would be limited so there is a boundary condition built on how many individuals there actually are. Because you can't accept someone that doesn't exist.

Secondly a constraint and these are listed by the way in my comments on mindful universe by Stapp. I think I sent that to you The Mindful Universe.

B: Yes, yes.
7:25
Y: And I have my commentary on it and somewhere in there is a list of these limitations, constraints. Like you cannot choose to be in a state of knowledge, as one act of more than one individual. In other words your act is constrained to just accepting one. If you want to accept two well you have to have another act. That is a constraint. And that is just to give you an example that you can't fine-tune it completely. Like the mass of an electron is not adjustable, because no matter what you can't change the formula, which is the third root of three factorial...

## $B$ : n squared.

Y: Times $n$ squared. $\left(\sqrt[3]{3} X n^{2}\right)$ That determines the mass of the electron. So no matter how, you can't adjust it. Well, people that try to get rid of mass by efforts. Trying to go build a mass cancelling machine, this theory says, don't bother to spend money in grants and peoples efforts on that sort of thing, because you won't be able to get a mass canceller.
9:20
Ok, let's do some more fine-tuning. For the molecules like DNA, Aha? to maintain their precise and distinct structures the electron must weight little compared to the nuclei of atoms. The nuclei of atoms are fixed for any given atom and, of course, we have already said that the electron's mass or its weight is fixed. So there was no adjustment being made here accept to select the right atoms to combine with their nucleus with the electron, so you have to select the ones that would work for making a DNA pattern. Like carbon, hydrogen, sulphur here and there. But these are the ones that work just right out of the whole selection. But you have to have these atoms. Where did they come from? Well, we'll deal with that in a little bit. 10:44

The preciseness of the location of any particle is determined by the degree of mass of its nucleus. Because the electrons around the nucleus are very light their orbits are much larger than the particles in the nucleus. It is the electron mass that determines the overall size of the atoms and the spacing between the atoms and the molecule. Because protons are 1836 times heavier than the electrons, atoms can be quite precisely located relative to the distances from their neighbours. So complex molecules can have well defined shapes.
11:33
So in nature we find 92 elements, 92 types of atoms to choose from. But only for simple life... only about five or six are really important. But if we didn't have that choice to choose from, like sulphur... They don't choose from uranium and thorium for life. But up to about an atomic number of 40 they are chosen from. But something had to choose them.
12:19
And they say, "Well, that was just a chance assembly that happened." Well, that's one explanation, maybe it's right, maybe it's wrong. But if were in the Lila Paradigm, we have an immediate answer. That these non-physical individuals are making these choices. Why are they making these choices? Why are they fine-tuning it? Why did they change the electrostatic... electric charge strength so that you get the spacing just right between the atoms and the molecules so that they will act just right for being able to make a little machine, a little molecular machine so that someone can just accept one of the individuals, that is one of the quarks or one of the electrons or positrons in that molecule and trigger off a big release that takes place through this whole string of molecular connections.
13:31
So he just does one thing and he gets a big result and the muscle contracts. So they went to all this trouble to build up and find tune these things so that they could do just one thing and one big result. And that's what these things are. Why did they do that? They did that because individuals are in... like a cocoon. I showed you that curve of the... The non-random curve, it's in the back I think.

B: This one.

$$
14: 28
$$

Y: That's the one. Most of them are... Have the ability of willingness, the capacity and whatever they arrived at it, there only using... I be n (I will be) connected to this divine individual and I do (this) to this non-physical individual. One for the circuit and one for doing stuff. The circuit makes him conscious of (a) common universe and the other on one is used to trigger off various patterns, sub-states that have been set up. Sub-patterns that are sub-states. So it triggers them, just like a gun you pull a trigger and you get a big bang result. So they...

> 15:26

The molecules act as amplifiers for actions and they act as smallifiers "if I might" for sensations. So they get just a calmed down or attenuated input for sensation. So that they are not ... Till the content of their state of consciousness is only slightly shocking to them. In other words there... instead having/using $10^{23}$ arrows that they could do, they are doing only two at a time.
16:05
Well... So they have to be a bit agile if they have got something working with one arrow and the other one for the circuit, then they move the one that is (free) to different things (individuals), so they keep two (functions) going. For actions and picking up specialized sensations, because they are hiding behind this... I am afraid I might be destroyed, consideration. Why are they worried about being destroyed or ceasing to exist? Because they don't know what they are. They have cut off their arrow to themselves. Why did they do that? For the fun of it. But once having done it, they are in big trouble.
17:16
Biljana, "Do you know this game that you play with and infant, to cover your eyes, and then go like this? In English it is called peek-a-boo (woo)."

B: (acknowledges)
Y: (Woo) So you cover up and contract and then uncover and say, "Oh, I found this! Oh, we discovered the Lila Paradigm."

B: Yes.
17:42
Y: Or we found America and we play from the highest level; it looks like play. Strictly speaking it's not the play in the human sense. It's in the Divine sense of Divine play. They don't really do it for fun, they just do it. And it is fun. So this is why they go to the trouble to fine tune, and the fine tune moves it from this random selection of arrows where you are accepting half, and not accepting the other half of the individuals; and it gets moved, the curve gets moved way over here to the edge of chaos where life is, where you have all these life forms. Your molecular student would be interested in this part. Your student.

B: Yes.
Y: Your student.
19:00
B: Yes, yes, he is doing just like this. Exactly this, he will be very much interested. The metabolic processes of molecules.

Y : Alright let's go on to another fine tune. A neutron is heavier than a proton by 0.14 percent, very small difference but it is a very important difference. This difference is important because it exceeds the total mass of an electron. In other words the difference between a neutron and a proton in mass, that mass difference is greater than that of an electron mass.
19:56
If electrons weren't so light, which they're 0.054 percent of a proton, which is lighter than the difference between a proton and a neutron they would combine with protons to form neutrons and there would be no hydrogen anywhere in the universe. Well these masses are fixed. The mass of an electron and the mass of a proton are fixed by combination, limitation formulas. This very formula that you have been working on.

B: Yes.
20:38
Y: So is it just an accident that we have all this hydrogen? Well, no, there is another thing called the weak force which makes up the difference between the electron and what is needed in mass for the proton and the neutron to have the relationship they do; and so hydrogen... The neutrons don't combine with all the protons just with about twenty five percent of them. And then the weak force prevents it from going any further. The weak force is adjustable. The strength of the weak force. And so by our choices we adjust the strength of the weak force. By... We'll get into that later, how that happens. I am just trying to give you an overview.
21:40
The next fine-tuning is the coupling between neutrinos and ordinary atoms must be weak enough so that they are not trapped in the core of a Super Nova.

You know Super Nova, big explosion of a star that started to collapse, compressed so tight that it just explodes tremendously. Out of the core of that comes flying out many, many neutrinos, trillions and trillions of them. Because they don't interact with anything with the exploding cloud they don't interact so they just fly out. So he is saying here, 22:30

The coupling between neutrinos and ordinary atoms must be weak enough so that they are not trapped in the core of a super nova allowing the transmutation of elements required by life.
22:45
In the core left behind. In the core of the super nova and still collapsing are some light atoms and the neutrinos flying out away from them leave them the chance to turn into oxygen, magnesium, sulphur, sodium, all things that are important for life. So... But if the interaction between a neutrino and ordinary atoms was any stronger than it is they wouldn't fly out and get away so that this...

B: Super Nova would capture them.
23:30
Y: So they can cook some atoms that we need. So that is adjustable, that strength of that interaction, between neutrinos, it is adjustable by choice. Now since scientists don't consider choices being made they don't think of these things because they have no one making a choice. Here they are choosing to study the subject and they
say there is nothing in existence that chooses. This is the importance of this free will choice argument, verses everything is predetermined. Everything is determined; but it is determined by our choices.

B: Choices, by free will.
24:16
Y : And there is some free determinedness that is made by the total number of individuals and the fact that our ability is limited to just being in a state of knowledge of another if we so choose. We can't be in a state of candy bar. You can't act with... in any other way than just acting to accept another individual. And I am not even talking about Theology. So he mentions these elements that are required by life. 25:00

Such as sulphur, oxygen, nitrogen, magnesium, if this coupling were even slightly weaker than it actually is the neutrinos would escape freely transmutation and dispersion would not occur.

He is a good astrophysicist, Martin Rees, he also a good publicist. He's a handsome man and very articulate.

B: May I say something? Or later about this fine-tuning and Super Novas.
Y : If it is on this subject, yes.
25:30
B: On the subject. Lately astrophysicists this last three or four years have discovered parameter sigma which shows that the mass of every super massive black hole is exactly 0.05 of the overall mass of the galaxy which is the host for this super massive black hole. Namely in the middle so to say of every galaxy, no matter if it passive as Milky Way our galaxy is. Or Andromeda, which is our neighbouring galaxy. They are passive, or active. No matter whether it is passive or active, nevertheless, they discovered and this is great discovery, that the ratio of the mass of the super massive black hole in the middle of the galaxy and the mass of the galaxy of the hole is constant. And it is 0.05 . (Note: active galaxies have several phenomena associated with them that passive galaxies don't, such as unusual appearance, non-thermal radiation, high luminosity, relativistic jets, etc.)

Y: Is it always... Is it not only constant? Is it always the same for every galaxy?
B: For every galaxy.
Y: The ratio
26:49
B: This was not known also it was not known; which actually clarifies that the super massive black holes which are (made up of) $10^{9}$ degree (solar masses which is much more than) ordinary black holes. These are super massive black holes. For instance $10^{9}$ solar systems (masses) like ours are needed to form a super massive black hole. (Note: The category of supermassive black holes starts at several hundred thousand solar masses and goes up to several billion).

[^0]B: This is huge; and it was considered to be destroyer... Destructive power. Super... Black holes and super massive back holes..

Y: Because it pulls in.
27:24
B: Yes. They are considered to be eaters... They eat the whole solar systems. And they have been considered to be destructive force. But no, now it is shown that they are not destructive; they are creative. They are fine-tuning of the universe actually.

Y: They are fine-tuned and they are in equilibrium.
27:47
B: In equilibrium. And even more so they discovered that even the passive galaxies as ours (Milky Way and Andromeda) posses a super massive black hole in the middle because this is the greater of the galaxies although it is not visible. This is which makes the galaxy passive. They are not visible, meaning there is no quasar.

Don: Quasar.
Y: Quasar.
28:15
B: Quasar, there is no quasar inside the galaxy to burn to be visible. Because quasar is made because of the different speed of moving of clouds of hydrogen atoms. (Ethos)

Y: Then that whirling accretion disks puts out an axis.
B: Yes. Ah, an axis and this is the axis of the galaxy actually.
Y: (acknowledges)
28:47
B: The whole galaxy rotates around this axis of the super massive black hole, which was not known because it was not visible. Why it was not visible? Because 3 billion years ago or something like this it... By whirling with tremendous power and tremendous gravitation, it was eating the solar systems around it. Eating, but by eating its gravitation grew... It became greater and greater and at a certain point it became so great that it was able to throw away (consumed) the solar system neighbouring (it). So it was... At certain point there was no food for the super massive black hole and so gradually it became...
29:45
Y: Like the Milky Way is.
B: Yes, it became burnt out.
Y: Quiescente?
B: Yes.
Y: Quite.

## 29:56

B: Quite, yes. Not quite, it is visible because... What makes it visible? What makes the quasar; these are great clouds of hydrogen atoms, which are moving with tremendous speed (note: to the angular momentum axis). But there are different speeds (of accretion) of one cloud (some material) and the other cloud (material) so a friction is created between them and this friction creates temperature of millions of degrees.

Y: So we can see it.
30:32
B: And so they are burning, they are burning and they are... They form tremendous light. So this is which (what) makes the quasars visible. But after they are filled up with solar systems, all the (of a) sudden they became so strength (strong), their strength arises and they pull away (consume) the solar systems around them. And so became isolated (deprived of food) and they are burnt (die) out. And they stop being visible.
31:09
Bret: Stable?
B: They are rotating still, but they are not visible because they have no food. They have eaten all the solar systems they could reach and by eating these solar systems their gravity becomes greater.
31:28
Bret: No parasitic radiation.
B: And by greater gravity they the centrifugal force is great and they pulled away (gobble up) the neighbouring solar systems. So they have no food anymore.

Bret: So no parasitic radiation when something falls in so not visible. 31:43
B: Yes, so it is not visible. And so this makes our galaxy in the Milk Way and Andromeda to be passive galaxies, and this is why the scientists, the astrophysicists, for a long time they didn't know that the passive galaxies also posses a super massive black hole. Just the active ones, in the active ones, the quasar (accretion disk) is visible. This process (black hole phenomena) is still in power. So... but later on by measuring by using Doppler Effect and this little... and what is the word when these lines visible.

Bret: Spectral lines.
32:28
B: The spectral lines they showed that... They are showing actually the speed (red shift) of stars around the super massive black holes and the speed (red shift) is faster near super massive black holes. And through the Doppler Effect and spectral lines and the speed of the stars near the super massive black hole they could be discovered. So they discover that the passive galaxies as well as the active ones which posse's a quasar (an accretion disks) never the less has the same ratio of the mass of the super massive black hole and the mass of the galaxy as a whole and it is named sigma and it is 0.05 .
33:18
Y: So the point is that that couldn't be if there wasn't a fine-tuning.

B: Yes.
Y: Right. l'll be right back. We'll go on; we are almost finished with our fine tuning project here.
33:56
The lack of uniformity in the density of matter in our universe, which is called capital Q , is needed for galaxies, clusters, and super clusters of galaxies to form.

That the lack of uniformity of density of matter. There are some places where it's denser, some places where it is thinner.
34:22
If Q is less than what it actually is, which is $10^{-5}$ our universe would remain dark and featureless. We would have no stars, etc. If it were much more than $10^{-5}$ our universe would be dominated by black holes and few stars and no planetary systems.
34:49
Now this is adjustable by the total number of individuals across a circuit and the size of the circuit. If a circuit is chosen to be smaller but it would be more likely that the number of crossover arrows would be dropped and that would lower the density. But it also lowers the size of the space if you change the size of the circuit. The space gets less for a given number of crossovers if you make a smaller circuit. Make a bigger one, but you can only make it so big, but within that there is adjustability. 35:34

Gravity is about $10^{36}$ times weaker than the electromagnetic force. Stars are so massive because... So that the outward pressure due to the repulsive electromagnetic force is overcome... The force of the atoms is close (strong) enough to heat them to a nuclear fusion levels.
36:08
So gravity is pulling the gas that is going to be a star together the electromagnetic force is trying to expand that ball of gas. But if you get enough particles of gas then the gravity gets strong enough that it will pull it in. And it will pull it in to the point that it heats up so much that you'll get nuclear fusion. And you, instead of just hydrogen, hydrogen fuses with hydrogen and you get beryllium and then that fuses and you get carbon, and so on. So you get the low mass atoms and molecules being formed due to the fusion.
37:08
But if gravity were only about $10^{26}$ times weaker. That is one tenth of a billionth weaker. Then the electromagnetic force... The life time of the average star would be about one year from the time the star formed to the time the star burned itself up and went to pieces. So if there is a change one tenth of a billionth, in the ratio between gravity, the strength of gravity and the strength of the electromagnetic force... Stars wouldn't...
37:52
That is if the gravity wasn't quite as weak as it is, the stars would only last for about a year, and there would not be time for any evolution to take place. It would be an entirely different universe.

Well is the strength of the forces adjustable?

38:17
Yes by changing the number of Alpha, the value of Alpha. You do that by changing the number K. The K. You change K; you change Alpha. The average number of individuals. The average number of crossover from a single individual. Now he makes a summary here that,

Fine-tuning can happen by three means. That is if you have a large number of variations
38:55
and if you have a selection system or multi universes and you decide, well, this is the one. You don't decide. You just find one that is... already has the variation that fits your needed fine-tuning. And say, Aha! This is where we are.
39:23
But they run into an awful conundrum about who is where. If they are in one of the universes, why aren't they at... due to the probabilistic distribution in quantum theory of the various probabilities there is ... that you would be in this universe and so much in this universe and a chance of so much of this universe and there would be a version of you in those; but they think the version of you is a body.
40:08
But that's not what is conscious. So if you have an understanding of the definition of consciousness... (It) has to do with a non-physical individual. You know that the nonphysical individual is one and he doesn't have parts that can be distributed in different universes.
40:31
There is another way that you can fine tune is you can have planned variation by a guiding intelligence. Like God.
and then you can select by some kind of biological form making choices to put things together a certain way, so you have an automobile of a house. So you get selection that way. But what they can't figure out is, is there just stimulus response and chance or is there free will selecting to build houses and automobiles. Anyway, they have to have a God and they have to have these biological forms that somehow have free will. Can't figure out how they have free will though. 41:30

And then there is a third way of fine-tuning is a large number, of little chance variation or mutations over time, then selection by survival, the Darwinian evolution.

Those are the ones he mentions, but he doesn't mention some ones that I am mentioning, that I am mentioning (which) is that you have non-physical individuals with certain constraints making choices for the primary reason they make certain choices over other choices is because they are concerned... They have denied themselves, so they have no knowledge of what they are and they are worried that... 42:08
They are conscious of themselves through a circuit as something other than what they really are, but close to that. But they are afraid that they are going to be destroyed, because if that circuit gets broken they lose their consciousness, and they think they cease to... They don't (just) think they seem to cease to exist; it seems like they have. And so they make all these... They hide in their two and three choice shell, to try to keep from being destroyed by input coming in and changing the content of their states of knowledge which has no affect on the real them at all.

42:58
But they don't know that they are the real them. They think that they're something that was created and something that can be destroyed; and so in an effort to try to survive, they have done all this. "It is enough to make you tired," my father used to say.

There are a lot of other possibilities of fine-tuning. You can... I have Martin Rees book here if you want to specialize in fine tuning in the Lila Paradigm.

B: Amazing.
43:41
Y : Any questions about fine-tuning at this stage before we go on to quantum? On page 27. Or suggestions about fine-tuning?
44:10
B: It's a very good insight. Yes, that finite number of non-physical individuals is what actually determines the things in universe. This is also... These clusters, which he is mentioning in his article, are also connected with the theory of deterministic chaos and of forming of chaotic attractors. This is also connected with theory of chaos. Just like you said here, the edge of chaos is/which created life, which, is amazing! Because Prigogine, llya Prigogine, he was a Nobel Prize winner in... He died also now in 90 so. I don't remember the year, 1964 he was a Nobel Prize winner in chemistry, he has written a book, Order out of Chaos with Isabelle Stengers. And there he is talking also...
45:30
Y : You remember his name?
B: Ilya Prigogine. Maybe Prigogine, Prigogine or maybe you're...
Y: I didn't recognize it as a name.
45:38
B: llya Prigogine, and he's explaining those phenomena by entropy; but this a better explanation so to say. Actually what he says is, "There is so much disorder in universe that out of this disorder, as a side effect, you have order". For him order is just a side effect of the overall disorder in the universe. He says it is so much entropy in the universe, that out of this entropy by chance you have order.

Y: (acknowledge)
B: And he is talking about systems closed to equilibrium. Did you hear of it?
Y: (acknowledge)
46:38
B: It is like a famous saying of him that, the happenings in the universe as a whole are due to system closed to disequilibrium actually. This is like you have a ball here on the top of the hill, and now a little something, which is not predictable, causes the ball to go here or here.

Y: (acknowledge)

47:07
B: Our system is not system in (bonds?) but it is system which is caused by entropy and by non-linearity. The non-linearity governs the universe.

Y: The dynamic equilibrium.
B: Pardon me.
Y: A dynamic equilibrium.
B: Ah yes. Exactly a dynamic equilibrium, because this is theory of dynamics.
Y: And that is what this is; it gets to stiff or gets to chaotic.
B: Exactly.
Y: Then you make their choices so that it comes back.
47:35
B: Yes, yes, this is the edge of chaos actually. And so he is talking about this. So his theory is different but I also recognized Prigogine's teachings or writings when you mentioned somewhere... I don't remember now, the English expression for radiations, this has to do with inflationary curve. With inflation of the universe, namely, if we consider the universe to have begun in big bang then... If we make an assumption that the speed of expanding of the universe was the speed of light, then this goes linear. But as you have shown in your articles, there is an inflationary curve, which has a point of inflection of going into this original curve, original line.

Why is it so? Prigogine explains with... unfortunately, I didn't remember the English expression. This is the radiation... It is a same radiation recognized in the surrounding of points in the universe which are so distant from each other that if we make an assumption that they were in interaction in the very beginning in the big bang, still they are outside these...
46:25
Y : The light foam.
B: The light form, they are outside this cone of space-time.
Y: Yes.
B: And it could be explained by inflation...
Y: Yes.
B: In the few $10^{-30}$ of a second after the big bang.
Y: (acknowledge)
49:43
B: Which, is totally in accordance with your articles. So in order to explain this points being further away than the theory of relativity and speed of light allows an the assumptions of big bang and the expansion after big bang with the speed of light
allows, inflation should be entered into picture. And this is how Prigogine explains these points to have (the) same radiation recognized. Although there is no way (for) the information to be passed from one to another, lesser (faster) than the speed of light.
50:33
Y: Well, the Lila Paradigm is so fundamental that we should have a staff of about 5000 people working on different aspects and applications. It will be a major paradigm shift. And then I could just go and sit in the sunshine and relax.

B: It would be a great loss.
51:00
Y: So we will go ahead with our overall picture if we might. If you think of things later on, you bring them up.

B: Ah, yes, yes.
Y: Quantum theory.
51:24 (Bottom of page 27 "The Lila Paradigm of Ultimate reality")
As regards to quantum theory the non-physical individuals are the selectors, the indexers who non-physically act to be in non-physical states of direct knowledge of non-physical individuals from among the many possible choices in the extant network.
51:44
In quantum theory, in the... I can't think of what it is called... Super-posed state, all possible combinations are considered to exist. If... It was, I think, Max Born, wasn't it, that pointed out that it is possible ones, that they are not actual.

B: And Bohr also. He says...
Y: Well, he got it from Born, Max Born the German.
52:30
B: Yes. I know Max Bohn. But Niels Bohr also said, "Quantum physics is not reality it is just knowledge about reality."

Y: That's right. But there is a reality; but it is not quantum physics. It is the Lila Paradigm. So don't confuse the possible choices with the extant choices. Again I use the word extant because I don't say the present or current choices.
53:03
A non-physical individuals making a choice to be in a state of direct knowledge of a specific non-physical individual determines which possibility becomes a state of direct knowledge or state of no direct knowledge. It is in that (It is in with regard to) that specific non-physical individual. This along with the subsumption due to the unity attribute reduces the overall arrangement, and all the substate arrangements of that overall arrangement to one phenomenon in the consciousness of the non-physical individual which has acted, and it appears in the consciousness of those non-physical individuals who are connected to, that non-physical individual. This is the act of observation and the non-physical individuals are the observers not some sensory system of a bio-body with which that non-physical individual may or may not be associated. This result is called a "measurement" or "reduction" or "collapse of the wave function" in quantum theory. There is no requirement for this non-physical
individual to in turn to be observed and thus collapse because that individual observer is nonphysical and thus the observer problem of quantum theory is resolved.
54:51
That should be clear with your knowledge that you have of quantum theory. You know the observer problem that infinite

B: Yes.
Y: problem, and Bohr never resolved it. He tried to resolve it by having one piece of apparatus that is doing the observing but then how can you have an apparatus...

B: Without consciousness.
55:21
Y: Yes. So you have to have another think observing the apparatus and so on and so on as long as you are always in the physical. So if you understand the consciousness, it is of the non-physical and know that it is a state of a non-physical individual you have broken that infinite regression. Now I showed this to Stapp and he said, "Yah, I know, I know, I want to talk about motion.
55:53
B: You know that Von Neumann was very close to this explanation when he said that, "There is no collapse, actual." He said, "No collapse". He... In a way he understood the collapse of the wave function as something which is not happening physically, actually. I believe...
56:17
Y: Yes, it is not physical and then people say, "Well you know he has made a mistake.

B: Who?
Y: They said that Von Neumann. The other physicist... that he made a mistake.
56:30
B: Ah, the other. He belongs here when we ask, "Is the measurement a problem?" Some say 'no' some say 'yes'. This saying is. This is leading to hidden variable theory of Einstein and David Bohm, then the many world interpretation of Paul Davis and Hugh Everett, then Copenhagen interpretation of Niels Bohr and George Berkeley interpretation of Neo idealism where Lila maybe belongs. But here these branches are. One branch is classical physics, which is OK maybe transcending till now, and the other one is quantum logic of Von Neumann. Yanish Von Neumann or John Von Neumann, Hungarian Jew, a genius, no one ever diminished his geniuses. He is recognized as genius.
57:21
And he said, "There is no collapse." He said, "The logic is... This rectangle is quantum logic." He says, "Nothing is wrong with quantum mechanics. What is wrong is..." What is wrong is... The error is in ourselves. What is wrong is we haven't developed a logic yet. There is no collapse.
57:51
Y: That's why I put all these in quotes.
B: Yes.

Y: Measurement, collapse of the wave function, reduction, are all in quotes because I am using their terms that the other ones used because there is no collapse, physically.

B: Yes.
58:12
Y: And that's why I think that Penrose is wrong because he saying that it is a physical thing with gravity.

B: Ah.
Y: Effecting fundamental particle in a micro tube, in a nerve.
B: It is correct that... Now, excuse me. It is correct that Penrose has added gravity to the weight factors of the possibilities, of the different possibilities in the...

Y: That's right, but gravity is a physical thing.
B: Yes.
Y : It is thought of as physical.
58:50
B: For instance Schrödinger's equation says, Either this will happen, this alternative will happen and the possibility for this to happen is $A$, or another possibility will happen and the possibility for this to happen is $B$, or a third possibility would happen and possibility for this to happen is E, and so on and so on. And later on... And he observes this weight factors or the probabilities for a certain out come to happen. He observes this to be complex numbers. Later on he added gravity into them. It is correct and it is physical. But actually in his book Emperor's New Mind ...
59:43
Y : Which I have right there.
B: You have OK. Great.
Y : I have read all three of his books.
B: Ah and the Shadow of Mind.
Y: Yes.
59:53
B: It is extraordinary. He says, at one point and I have... I explained this once, I
believe. He says, "Actually the collapse happens in our minds." He says so.
Y: Right direction.
B: When he says...
Y: But he doesn't define mind.

B: Ah, Ok. This is another thing. Because when I explain with the balls, this is from Penrose teachings. He says, "I have two balls. Two friends have two balls, one white, one black. And they are closed into closed boxes so I don't know which is one. So my friend goes to London for instance. I open my box and instantaneously the function of possibilities whether this should be white ball or this should be black ball, or, or, or... which is Schrödinger's equation, collapses and all of the sudden I know. But nothing physically happened. I open my box. I see that it is white and I say, "My friend in London has the black ball." Although there is no possibility for the signal to go faster than light."
1:01:07
Y: There was no signal and he did know it, but he didn't see it. He didn't see the black ball in London.

B: Yes.
Y: Until his friend told him, but that's later by regular transmission. So he knew it. The consciousness of seeing and perception is in the mind. But where is the knowledge?

B: The acts you say.
Y: I say, "It's not in the mind.
B: But the acts, the acts of ... The acting.
1:01:41
Y: Yes. That... What happens at the moment he takes off the cover here. It is not that act; but it's knowing that this is a white one, and knowing that the other one must be black. All this is in the realm of non-physical direct knowledge, strictly speaking, not part of the mind. It is part of ultimate reality. So this is correct; but they haven't described what is really happening. They just say, "It is in the mind."
1:02:23
Everything they don't understand, they throw it in the mind, without defining it. Of what is going on in such situations. OK.

B: May I ask something else?
Y: OK.
B: Whether according to Lila these possibilities, they are formed by different nonphysical individuals.

Y: They are formed by what?
1:02:55
B: Are they, these different possibilities in the function, in the overall picture of something, are they formed (the possibilities) are they formed by different nonphysical individuals or...
1:03:10
Y: Yes. I'll explain to you how. Say there is an (a set of) extant choices that everyone is making, some (individuals) in states of knowledge some not in states... or (in) states of no knowledge.

1:03:34
If someone is in a state of no knowledge they have the choice to be in a state knowledge; but they can't make a choice to be in a state of no knowledge. They are already in it, so to speak already. So there is a constraint right there.
1:03:51
So the extant pattern of all the choices determine(s) what the possibilities are. You can do... all the individuals and then you can choose to know this one because you are in the state of no knowledge of that one. But you can't choose to know this other one because you are already in a state of knowledge of him.
1:04:22
B: But this is just me, just one non-physical individual.
Y: Alright but integrate all of them.
B: Either Schrödinger's function is concerning one or different, or many of them because you say.

Y : It is all of them.
B: I know...
Y: Taken individually and summed.
1:04:44
B: I know, I know. Me, as a non-physical individual, I could choose to be in state of direct knowledge with some other non-physical individual with which I am not already instate of direct knowledge; and this is $\mathrm{C}-1$ for instance. Or I could choose, or is plus, I could choose to be in state of direct knowledge of another or not be, for that matter as you say.

Y: Well I...
B: I couldn't choose not to be. I understood.
Y: You could be in either one.
1:05:21
B: But this is still me, one (non)physical individual who has all these different possible choices. My question is whether these possible choices, these choices are for one individual to choose.

Y: Yes.
B: So then, this is something else.
Y: That... It is for that observer.
1:05:48
B: For one observer, just this one, just one physical individual has this choice or this choice or this choice.

Y : Observation is only done by an observer.

## B: By one.

Y: By anyone.
B: Not by an assemble, for instance a circuit.
Y: No. Observation is done one individual, now.
1:06:15
B : The collapse is done by one individual; this is clear to me. The collapse is done by one individual making choice. But the possibilities...

Y: But if you have like this, this is individual $Q$ and this is $M$. Now if $D$ here chooses $E$ that is going to affect what $Q$ is conscious of and it's going to also affect what $M$ is conscious of.

B: Yes.
Y: But they're separate consciousnesses.
B: Yes.
1:06:51
Y: This is for him. This is his consciousness, each one has his own, but it was... The content of their consciousness was done by $D$ accepting this. So who determines what? You have to consider all of them.
1:07:11*
B: I know they are all included but... And I know that when collapse happens this is one individual making choice. When one individual makes a choice, all these assemble possibilities collapse. But what I am asking...

Y: No they don't collapse actually. All there is that D has made a determination and...

B: Yes, yes, I understand. It is made...
1:07:41
Y: So D makes a determination that it $E$ it could have done $L$ or $R$ over here, he could have done those. But he does this one.

B: But this is also in existing quantum physics when we make a choice.
Y: Yes. It is in quantum physics.
1:07:57
$B$ : Then $B$ comes into picture and it solves the problem. But my question is whether, is it the case when I am just one individual in a circuit of individuals and being so, I don't have direct knowledge; I have indirect knowledge, a common knowledge of present time space and whatever.

Y: Yes. These have indirect knowledge of E...
B: And having this common knowledge accepted by all the individuals in the circuit, which they all share...

Y: They are all...
1:08:37
B: By having this I... there is a function of possibilities, of Schrödinger's wave function, formed by the whole circuit. This is my question by having a common... because...

Y: Yes, it's the sum. This circuit sums up everybody's actual extant choice.
B: Yes.
Y: The possibilities are what other choice might they make instead of the ones they are making.
1:09:09
B : The other non-physical individuals?
Y: Yes. Well, no, all of them, leaving no one out.
B: So actually in this picture which is giving Schrödinger's wave equation which is sum of possibilities. This will happen or this or this or this.

Y : As long as you realize that they are possibilities and not actualities.
B: Yes. This is known.
Y: Well, I don't think you would be asking your question if you thought it though.
B: No, no, I don't think they are actual; I think they are possibilities.
Y: They are possibilities?
1:09:47
B: They are possibilities.
Y: But...
B: But these possibilities you see.
Y: But all of these know the same thing. This knows... No matter what D does, M and $Q$ are going to know what it is. That's the summation.

B: So these are different aspects of... These possibilities are different aspects or different points of view so to speak.
1:10:20
$Y$ : This is a different...
B: Of different individuals.
Y : It is a different individual.
B: So these are different individuals actually in this assemble.

Y: Yes.
B: Include.
1:10:31
Y: We determine what arrows exist. And there is a whole bunch of possibilities of doing something else because we have the ability to choose, constrained by the constraints, I was talking about. And those combin... That combination gives the possibilities. But since you have the power of choice, nothing makes you do one or the other. You... Either you do or you don't.
1:11:09
And maybe this will help if you consider how many choices one is making per second. I calculated it out. The average individual even the ones that only have one or two choice arrows that they are using. In one second, on average, it's $10^{22}$ choices per second. This is alive with choices. Wooshiwooss.
1:11:38
B: No, I ask the question because when physicist are forming Schrödinger's wave equation, the equation of possibilities, the common sense of present time and space is included into this picture. This is why ask.
1:11:58
Y: And they don't belong there. This is why quantum theory is incomplete. Because if they introduce consciousness and observers, then you have to have... Remove time and the illusion of space both. So you won't have Hillbert space with various possibilities and dimensions in it. You just have individuals who either are making a certain choice or they are not, with regard to each and every individual. Each individual that's true for. This is an important point; and we shouldn't leave it until it is resolved. And I am not sure how to resolve it because this is the connections that you haven't made yet.
1:13:02
B: I understand that the collapse is due to one non-physical individual making his choice and this all collapses.

Y: Yes that's right so we have a different experience.
B: What I was asking was, about these different possibilities and you said yourself that they are actually... What the... Other non-physical individuals are involved.

Y: They are involved they are not making the choice. It's D here that makes the choice here, this is the example. D accepts E...

B: Because.
1:13:58
$Y$ : And then that effects the consciousness of $Q$ and $M$ and all the rest. Cause they are connected.

B: So everyone of these possibilities is referring to another non-physical individual and when D makes his choice it collapses.

Y: Yes and you have got a new set of possibilities. Because it's different because this has happened. So now you have got a new set. So it doesn't really collapse...

B: Because this actually... For instance C-1 will occur as a possibility if D decides not to act to have a direct knowledge to a non-physical individual.

Y: Yes.
1:14:58
B: Or this possibility will occur if $D$ decides... This was my question. Whether it is all about D .

Y: No it's not. Anyone out here...
B: Because one...
Y: Anyone out here billions of them.
1:15:19
B: To clarify my question you know. My question was whether... There are two possible situations for instance A and B. In the first possible situation, the explanation of this might be if $D$ decides to be in state of direct knowledge to nonphysical individual $Z$, for instance. Then we have possibility $\mathrm{Z}-1$. Or if D , everything is about $D$ here. If $D$ decides not to be in state of direct knowledge to $Z$ but to be in state of direct knowledge with M, then C-2 possibility arise(s). Or D, everything is about $D$ again. $D$ decides not to be in state of direct knowledge of any of them, but to stop being in state of direct knowledge of $E$ and to be in positive state of no knowledge of $A$.

Y : Then there is a new state.
1:16:25
So there is a new state C-3. But everything is about D. And then when D decides, this collapses. Now we have an extant situation. Or...

Y: Why (do) you write a formula like? Why not do one that allows for R over here?
And we take that either D or R makes a choice and...
1:16:56
$B$ : This was my question. Is it only $D$ ? Or is it... this is for $D$, this is for $R$, this is for someone else?

Y: And I have answered it three times and said every time, "It is about all of them. It's about R and M and Q , all trillions of them. Anyone of them can make a choice because they have that choice."
1:17:17
B: OK, yes. Then there is also collapse. But then... but this is also true, that I could make....

Y: You could isolate them.
B: I could write a situation just for D.
Y: Yes, you could.
B: Then OK. Then it is clarified.

## 1:17:36

Y: I don't know which Schrödinger's has done. I don't understand the equation well enough.

B: Otherwise, it is clear that whether this is this way, everything is about $D$ or it is...
Y: Universal.
B: The other way, every possibility is for other non-physical individuals...
Y: Yes.
B: Nevertheless, which is the situation, when $D$ decides this changes and this changes. So this is clear.

Y: Or if.
1:18:04
B: My question was, "In this existing equations, whether it is this case or this case?" It was clear for me that when D decides, the whole assemble is destroyed no matter whether it was just for D or for any other.

Y: That's true.
B: Maybe it is not important. Maybe it is not.
1:18:30
Y: It is important. I said it was important and I think we have clarified it between us now. I didn't understand your question and you didn't understand my answer. Now we have.

B: OK.
1:18:47
Y: So, there are two different approaches: one is a unique one for one individual and the other is a universal equation, perhaps. I think it is probably unnessasary. OK, the next paragraph here. There are limitations...

B: Yes, yes.
1:19:13 (Top of page 28 "The Lila Paradigm of Ultimate reality")
Y:
There are limitations to a non-physical individual's ability to select non-physical individuals to act of which to be in a state of direct knowledge, e.g. For example, a non-physical individual cannot act to be in a state of direct knowledge of a nonphysical individual of which it is in a state of direct knowledge. Other data shows that acts with regard to the extant network of a non-physical individual and states are close to being random; therefore, the distribution of the possibilities of the extant state determine the values of the wave function, and thereby the probabilities of the various possible outcomes.
1:20:00
By random I don't mean this kind of random. I mean, at this state, that there are so many going one way, being in more and more states of knowledge or less states of knowledge. It's jumping back and forth. And those are near to random.
(Zedaaddzzzeda) It's alive! And individuals find it fun. No matter how miserable they get and how much torture and pain and unhappiness and despair they go through, they still... Once in awhile, they blow their brains out and think that will end it. And they find themselves still going on. (Zeddaddazid) of a different kind. They just don't have a biological form they're are associated with. They finally get tired of that and get reborn.
1:21:00
OK. That's all I said in this paper about quantum theory. But if you want to, we can go through Mindful Universe and look at my comments about the difference between the Lila Paradigm and Stapp's dualistic approach that he uses. It would take a long time. But we can do it if you want to.

B: OK. Maybe.
1:21:35
Y: I think it is probably not necessary to get an overview. Then what I have added here is... Here is another version that stresses combinatorics. It says the same thing that we have just been over. So I don't think that there is any point in going over it. That if one wanted to study another way of putting it, that's another way of putting it. Then on page 31 there's proto phenomena and there is another way of putting all that about existence and unity and acts and all that stuff. I was putting in... I would like to go over the table when we get to it on page 35.

Bret: My numbering it different than yours.
Y: Your what?
Bret. The numbering of my pages. Or at least of this topic.
B: To this.
1:22:32
Y: I have no idea. So we have at the top of the column,
Type of combination. The simplest example
of it in diagraph form; and then what
Type of proto phenomenon

| Type of <br> Combination | Simplest <br> Example | Type of Proto-phenomenom |
| :--- | :--- | :--- |

is represented by it. Now the first one we know right off. It's a basic type of combination and it's self where the arrow goes around itself and one is oneself as a conscious non-physical individual is what is being represented by that.

| Basic - self | Oneself as a conscious nonphysical individual. |
| :--- | :--- | :--- |

The next one is other, that is $A \rightarrow B \bullet$. Of course, you know that one. $A$ is conscious of a unit of matter $B \bullet$ based on individual $B$. So this is kind of a summary table.

| Basic - other | $\mathrm{A} \rightarrow \mathrm{B} \cdot$ | A unit of matter (A is <br> conscious of a unit of <br> matter [B•] 'based' on <br> individual B). |
| :--- | :--- | :--- |

Then the basic bifurcation which we have also been over: $A \rightarrow B \bullet, A \rightarrow D \bullet$ comparison of two units of matter not in time or space. It's judgement of meaning. We are going to go over this probably tomorrow, this level because we actually went over it in the form under linear plus bifurcation. Further down where it says... Right here. That's the one we went over when we were studying space. But we bypassed this comparison of two units of matter not in time or space which represents judgement or meaning. It's that which will help to understand the one about space better. I am not satisfied yet that we've got that completely described yet.

| Basic - Bifurcation | $\mathrm{A} \rightarrow \mathrm{B} \bullet$ | Comparison of two units of <br> matter not in time or <br> space. Judgment. <br> Meaning. |
| :--- | :--- | :--- |
|  | $\downarrow$ | $\mathrm{D} \cdot$ |

1:24:40
Then the next one down, second person, well we've (split/slipped?) that easy enough. A unit of matter... A unit of matter... A and $C$ are each conscious of a unit of matter based on individual B. So they are both conscious of the same individual B but that each has their own consciousness of it.

| Second Person | $\mathrm{A} \rightarrow \mathrm{B} \cdot$ | A unit of matter (A and C <br> are each conscious of a <br> unit of matter 'based' on <br> individual B). |
| :---: | ---: | :--- |

1:25:13
Then we have the linear arrangement $A \rightarrow B \bullet \rightarrow C \bullet$ comparison by contingency, whatever that word means. We have to discuss that one of these times. Time continuum between pro-fermions $A$ is conscious of $C \bullet$ in the present and $B \bullet$ one time unit in the past. This represents memory and the process of time durating. It also represents the illusion of change and proto quantum fluctuations. It makes the appearance as if something were fluctuating.

| Linear | $\mathrm{A} \rightarrow \mathrm{B} \cdot \rightarrow \mathrm{C} \cdot$ | Comparison by contingency. Time continuum <br> between proto-fermions (A is conscious of $\mathrm{C} \cdot$ in 'the <br> present' and $\mathrm{B} \cdot$ one time unit in 'the past'). Memory. <br> Duration. Change. Proto-quantum fluctuation. |
| :--- | :--- | :--- |

1:25:58
And then linear plus bifurcation, is the one we have gone over as space. Space continuum between units of matter. For $A \quad C \bullet$ is one unit of 1-D space from $D \bullet$.

Dimensionality is included here because here we have one dimension, but we do by adding one more arrow from $B$ out to another individual then we would have orthogonality. I got another 'o' in there this time.

| Linear plus Bifurcated | $\mathrm{A} \rightarrow \mathrm{B} \bullet \rightarrow \mathrm{C} \bullet$ | Space continuum between <br> units of matter (for $\mathrm{A}, \mathrm{C} \cdot$ is <br> one unit of 1-D space from |
| :--- | :---: | :--- |
|  | $\downarrow$ | $\mathrm{D} \cdot)$. Dimensionality. <br> Orthogonality. |

## 1:26:40

Circuit the next one. The magical circuit. Self as non-physical individual located at the same present time as the units of matter. I didn't point this out before and we need to talk about it a little bit. Notice that each individual, let's take, for example, individual A, is located in the same present time as all of them are in. And we did talk about this it's all the same present time for them. But that the individual himself is conscious that he is in that present time. He's wrong. He is not in it. But the illusion of the circuit makes him convinced. "Well, I'm here right now." And they think that is what I mean. This illusionary 'now' is what I mean by timelessness.

B: Aha. Yes, yes.
1:27:42
Y: And it's not, timelessness means timeless, no now. And it leads to the concept of infinity, this circuit arrangement. So an individual here not only is conscious of being in a now, in a present time now, along with the others but with all the now that the particles exist. All these. He says, "Well, I am in the same 'now' as all this. There is me and this and this and this."
1:28:25
So deluded we have become, that in order to get undeluded we have to go through a big process of sadhana, of effort to de-identify and then to realize one‘s own nature in full. That's tomorrow's class though. Not get confused. But this is a pretty drab universe. There is just time with a bunch of particles and none of them are located anywhere. They are not in space in this circuit.

| Circuit | $\mathrm{A} \bullet \rightarrow \mathrm{B} \bullet$ | Self as nonphysical <br> individual located at same <br> present time as the units <br> of matter. Concept of <br> infinity. |
| :--- | :--- | :--- |
|  | $\uparrow \quad \downarrow$ | $\mathrm{D} \bullet \rightarrow$ C• |

1:29:12
But if we go to the next one down, we have a crossed-over circuit. Now, we have a bifurcation. We can have at least some unbounded infinite or an unbounded one dimensional time.

B: And two dimensional or no? Ah, no one.
1:29:33
Y: That is one dimensional because we have only one bifurcation. The text says oneself as non-physical individual located in present time and in the present space.

He is in this one dimensional unbounded space. It is sort of like the book Flatland. Did you ever read a Macedonian version of Flatland? Well, there's only two dimensions. And there is a whole story about living in this two dimensional world.

| Crossed-over circuit | A• $\rightarrow$ B. | Oneself as nonphysical <br> individual located in <br> present time and space. <br> Observation from a |
| :--- | :--- | :--- | :--- |
| viewpoint Fermions, |  |  |
| quantum fluctuations, |  |  |
| fermion pairs with + and - |  |  |
| charge. Bosons (the |  |  |
| cross-over arrow). |  |  |
| Relativity of motion of |  |  |
| fermions. Extra |  |  |
| dimensions decay into |  |  |
| energy. Gravity, electro- |  |  |
| magnetic, weak, strong |  |  |
| forces. Mass. |  |  |

1:30:16
B: I haven't read that book. But I have read...
Y: It is a 1940's book. I read it when I was a teenager.
B: By whom?
Y: I forget who it was.
B: OK.
Y: Very famous amongst physicists.
B: George Gamow? No.
1:30:29
Y: It may have been. No, it was someone else. Gamow wrote some stories also though. Observation from a viewpoint. So he is at one point on this unbounded line in this example; and he is conscious as if he were there viewing from it the rest of these individual particles. $C \bullet B \bullet, A \bullet$ and except if he is $A \bullet$ he wouldn't see $A \bullet$. 1:31:04
B: Flatland is two dimensional and this is one dimensional.
Y: Yes.
B: It is on a line.
Y: Very boring, hard to write a story about that. But you can do it.

1:31:15
Extra dimension decay into energy, if there were any. Bosons are the crossovers. Fermions, quantum fluctuations, fermion pairs with plus and minus charge. What happened to our plus and minus charge? I had a plus charge over here and a minus charge here on D . B has a plus charge and D has a minus charge. We lost those in the shuffle.

## Don: Sorry.

1:31:51
Y: Relativity of motion of fermions also comes about by this crossed over circuit. Just my developing it. An extra dimensions decay into energy, gravity is formed, electromagnetism, weak strong forces and mass, are all involved. I made this up for David Chalmers he never got past the first page of the paper. They get so much stuff and they have all of the student papers they have to correct. They just treat it like another graduate student. Draw lines through it and say wrong.

B: Too early for him. It's too early...
1:32:52
Y: It's understandable, they're busy and they are hectic. And they have a hard time. And unless they can think that the first page tells them something they didn't know before that's probably true, they won't go on. And I don't blame them for that. Don't you do the same thing?

B: Not to blame them.
1:33:13
Y: Well, you don't blame them. I know you don't; you are not that kind. But do you read every word they give you or do you..? when you see that the development is lost?

B: I browse through it.
Y: Yah. (?!!) Well, at least you do that.
B: I appreciate their effort actually.
1:33:38
Y: We have just a few minutes left and I would like to read to you another paper introduction.

B: Yes.
Y: This is called The Origin and Self Organization of the Universe. Nov 1993. And I am going to read to you a little bit of it. Wrong one. This goes back to 91 .
1:34:33
The important point is not the terminology, but the recognition that what complementarity allows us to say about the reality which lies behind the phenomena is that it has the characteristics to be able to produce different sorts of phenomena in different sorts of interactions. And the way these phenomena are described cannot be used to characterise the reality which causes them. (H.J. Folse)

1:35:15
You read this the other day, that quote from the philosophy of Niels Bohr in the book by Foss. The point is... is that you can't use any observations to give you what you need to know in order explain what is behind phenomena. You can't use phenomena to tell you what is behind it. That's true. So you can't use the laws of physics or any other laws of the physical world to tell you what is going on back there behind the scenes.
1:36:13
But Steinberg said, "You have to have metaphysical rules to describe what goes on behind the scenes." And he is right. The Lila Paradigm is those metaphysical rules. You can't just do a George Berkeley and say, "God does it all." Well, yes, he is right. God does it all. But what does God do? Are there limitations on God? Well, it looks like there is.
1:36:41
But if you take God as the totality of all of us, then there is no real limitations. But if you take it from the viewpoint of any one individual, it sure seems like you are limited. Even though you can accept everyone or not or selectively, do it any way that you want. You still... You only have N squared of a part, the inverse of N square of a part of what is going on.
1:37:03
A new paradigm to account for the reality behind phenomena is outlined. In the model, metaphysical agents are related to simple structures that function as the mechanism of quantum theory that causes reduction in observation, resulting in those agents being observed as quanta of physical matter by other agents. Some of the structures included here form the bases of elementary space and time. And we believe such structures underlie all the phenomena of the universe. This approach leads to an explanation of what reduction space and time are.

Now, if I read that in a paper that came across my desk, I would try reading further.

## B: Yes.

1:38:07
Y: But apparently, I am saying too much. It sounds too good. It sounds impossible. And I don't even mention the word non-physical. I just say metaphysical so that they are not frightened. I am reading these to show you. No matter how well written it might be, I don't think it will get published unless we do something; and I don't know what that something is.
1:38:40
B : The magnitudes, the values.
Y: Hum?
B: The values you find through magnitudes. This is convincing.
Y: The Vedas?
Darshana: Values.

B: Values.
Y: So we quote the values right in the front.
B: Yes, of course.
Y: I think... Aha.
B: It should be stressed, if not in the first sentence, the second. You... because you have...
1:39:04
Y: And I thought I had to give them an overall picture instead of the facts.
B: But the...
Y: I think you are right.
B: Yes. It should have the facts.
Y: Get their interest and then show them what they need...
B: Yes, and then show them.
Y: And then show them what they need to know.
1:39:20
B: Something connected with rest mass, with curve of connectivity, it should be.
Y: Good, I think you are very wise (be)cause I am convinced otherwise that it doesn't work. Another day, we will read some more introductions.

B: OK.
Y: OK. Anything else you wanted to... You made a note here about something.
B: That was not really concerning physics but spirituality actually. But when people stress present time, that it is illusion also, that present time implies past and future.

Y: (acknowledge)
B: So whether you say present in past and future, you are still in the illusion. 1:40:30
Y: Right. Very good. OK, then, we'll start again a two o'clock. There is no class today. There is a scripture class tomorrow at 12:30 to 1:30. And we'll see what we do this afternoon.


[^0]:    Y: (acknowledge)

