

Part 2, Paper 41, Physical Asp... the Local Universe, Archangel

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SUMMARY KEYWORDS

Nebadon universe, creative spirit, cosmic melting pot, super universe, supreme power centers, Salvington headquarters, energy manipulators, star life cycle, red giant, white dwarf, supernova elements, cosmic nebulae, gravitational pull, solar system formation, cosmic bureaucracy

SPEAKERS

Sarah, John

S Sarah 00:00
You ever get that feeling like when you look up at the night sky and and you see all those stars, you know, and you just, you feel incredibly small, like a like a tiny speck in this, this vast universe, yeah, it's humbling,

J John 00:11
isn't it totally

S Sarah 00:12
and kind of awesome at the same time. Well, today, we're diving into that feeling, that sense of awe. We're going to explore the structure of our cosmic neighborhood, trying to get a handle on this, this mind boggling concept of a universe. We're

J John 00:28
talking about, nembadon, nebad Nebadon, our local universe,

S Sarah 00:32
our local universe. You mean, like there are others? Well, there

—

- J** John 00:35
are others, countless others, according to the Urantia Book, that's our source material for this deep dive, by the way,
- S** Sarah 00:41
the Urantia Book, yeah, always full of surprises. So, okay, countless universes. Let's unpack that a bit. I mean, how do we even begin to understand something that fast? Well, imagine
- J** John 00:51
for a moment, not physical boundaries, but a energy field, yeah, a life force pervading everything. The Urantia Book calls this the creative spirit. The creative spirit, the creative spirit and its influence, that's what defines the borders of a local universe like Nebadon,
- S** Sarah 01:07
okay, so not like a physical wall or anything, but more like this, this sphere of influence emanating from this creative spirit. Precisely.
- J** John 01:16
It's about the reach of this creative energy, not some arbitrarily defined boundary. Okay?
- S** Sarah 01:21
I think I'm starting to get it so Nebadon, is this, this energy defined space, shaped by the creative spirit? That's pretty wild. But if there are all these other universes out there, each with its own creative spirit, I'm guessing. I mean, did Nebadon? Did it always exist? How did it, how did it even come to be another
- J** John 01:37
great question, and you know, the answer might surprise you, Nebadon, it wasn't born from a single event, not like a big bang or anything. It's actually, think of it like a cosmic melting pot, remnants of multiple ancient nebulae, each with its own history, its own unique characteristics, all coming together a cosmic
- S** Sarah 01:56
melting pot. I like that. So Nebadon is kind of like a blend of different cosmic ingredients, exactly.



John 02:02

And the Urantia Book even gives us a name for one of these ancient nebulae, andronova.



Sarah 02:08

Andron over Wow. It makes you wonder what sorts of stars and planets might have formed from that, that ancient mix. But if Nebadon is just one of many, where does it fit in the grand scheme of things, like, is there some sort of super duper universe. There is. It's



John 02:21

called the Super universe. Ours is orvanton. And just like our planet orbits the Sun Nebadon, it orbits a central point within orovanton. Whoa,



Sarah 02:30

wait a minute. So we're talking about layers upon layers here. Okay, I need, I need a metaphor. Give me something to help wrap my head around this.



John 02:36

Oh, a metaphor. Yeah. And I like it. How about this? Think of Nebadon as a bustling city,



Sarah 02:42

a city, okay? I can see that lots going on, constantly evolving, exactly,



John 02:46

and that city, that's Nebadon. Now that city exists within a state, which would be our super universe, or vonton, okay,



Sarah 02:55

okay. And is that state? Is it part of a country, like a really, really big country, you



John 02:59

got it? The country represents the grand universe. That's the big picture, encompassing

everything, okay,

S

Sarah 03:04

okay, I think I'm starting to see it. But that brings up another question. I mean, with all these cosmic structures, all this movement, all this energy, what's what's keeping everything running smoothly, what's the organizational structure here? Well, that's where

J

John 03:17

we get into some really mind bending stuff. The Urantia Book describes these forces, these incredible forces called supreme power centers. They essentially act as the universe's energy regulators. Supreme

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Sarah 03:30

power centers. It sounds like, I don't know, like a cosmic version of, like a power grid, or something kind

J

John 03:35

of but on a scale, you can't even imagine. We're talking about receiving raw power, like unimaginable amounts of energy from a source as vast as a super universe. Wow, modifying it and then distributing it throughout an entire local universe. That's their job.

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Sarah 03:50

So the supreme power centers, they're like the ultimate Energy Managers making sure everything stays powered up.

J

John 03:56

You could say that they are fundamental to the very fabric of the universe, these forces. But where

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Sarah 04:01

are these, these power centers located? Is it like a, like a giant cosmic power plant somewhere?

J

John 04:06

Not a power plant? No. But the Urantia Book does tell us they operate from a place called

salvington. Housington salvington, it's the headquarters, so to speak, of our local universe. Nebadon salvington,

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Sarah 04:18

it sounds like something out of a, I don't know, a fantasy novel. So there's this, this place, the salvington, and it's like the cosmic control center for Nebadon. That's amazing.

J

John 04:29

It is. And get this, there are 100 of these supreme power centers on salvington, 100 100 working in unison. Wow.

S

Sarah 04:36

Okay, so we've got salvington, the headquarters with its 100 supreme power centers managing the energy grid of Nebadon. It's a lot to take in, but I have to ask, is salvington the only one? I mean, are there other places like it out there?

J

John 04:51

The Urantia Book mentions other architectural spheres. Densia, for example, that's the headquarters of our constellation of stars. Wait. So

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Sarah 04:57

our solar system is part of a constellation. Yeah, it is.

J

John 05:00

It's part of a local system called satania. Satania, yes. And satania, it's part of a larger constellation of stars with its own headquarters, edentia. Okay,

S

Sarah 05:11

so it's like levels of government, but for the universe, it's good

J

John 05:13

way to think about it. And there's Jerusalem. That's the headquarters for our local system, satania. So

- S** Sarah 05:19
we've got salvington for Nebadon, edentia for the constellation and Jerusalem for satania. Wow, that's a lot of levels of cosmic bureaucracy. But are these places? Are they powered by stars?
- J** John 05:32
Actually, that's one of the most fascinating things about them. They don't rely on stars for their energy. They're powered independently,
- S** Sarah 05:39
independently. How does that even work? Oh, that's
- J** John 05:41
a question for another deep dive, perhaps. But for now, let's just say the universe has ways of providing okay,
- S** Sarah 05:47
I can leave with that bit of mystery for now. But if these supreme power centers are managing the energy on a grand scale, I mean, is there someone or something actually like directing that energy on a more local level, you know, making sure it gets where it needs to go. Another
- J** John 06:03
great question, and that's where the concept of master physical controllers comes into play. Think of them as, I don't know, like the middle management of the universe.
- S** Sarah 06:13
Middle management, huh, keeping the cosmic gears turning. I like
- J** John 06:17
it exactly. They work with those supreme power centers. We talked about making sure the energy is distributed effectively within their designated jurisdictions, and our jurisdiction that would be satania. Okay,

S

Sarah 06:29

so each local system like satania has its own master physical controllers, kind of keeping an eye on things precisely,

J

John 06:35

and one of the things they oversee is quite interesting. The Urantia calls it a dark Island. A dark Island, what is that? It's a region of incredibly dense matter, so dense that it doesn't emit light the way a star does. So it's like, like a black hole, not a black hole, but it does have an incredible gravitational pull. And the Urantia Book suggests that these dark islands, they play a critical role in how energy is distributed throughout a local system,

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Sarah 07:03

fascinating. So even the darkness has a purpose in all of this. But if these master physical controllers are responsible for directing the energy, I mean, do they actually do they do it themselves, or is there something else at work here? Well, the

J

John 07:16

Orancho book describes beings called energy manipulators. Yeah, they work under the guidance of the master physical controllers. It's like, Well, imagine being able to fine tune the energy flow on a planetary scale.

S

Sarah 07:27

You're saying they can actually manipulate energy to influence what like the conditions on a planet.

J

John 07:32

It's certainly a possibility, isn't it? Wow. Okay,

S

Sarah 07:35

this is getting more and more interesting by the minute. So we've got this incredible system for managing and directing energy throughout the universe. But what about the stars themselves? Where do they fit into all of this? So last time, we were talking about those incredible energy manipulators, kind of like the cosmic electricians, right? Making sure the energy gets where it needs to go.

J

John 07:57

 John 08:03
It's a good analogy. But, you know, it's easy to get caught up in the grand scheme of things, the overall energy management of the universe totally. But

 Sarah 08:04
what about the stars themselves? Exactly?

 John 08:07
I mean, we take our sun for granted, but it's always there, right? But it's not just this static thing in the sky. The reality is, it's far more dynamic. Dynamic.

 Sarah 08:15
How? So you're not gonna tell me the sun has a personality. Are

 John 08:19
you? Well, the Urantia Book does describe it as having a life cycle. A life cycle.

 Sarah 08:24
You mean, like it was born,

 John 08:25
in a sense, yes, stars, they're born, they evolve, and eventually they die.

 Sarah 08:30
Whoa. Okay, hold on, so stars, they're not just these eternal things. They don't just, like, burn forever. Nope,

 John 08:37
they have a finite lifespan, just like us, although their timelines are a bit longer,

 Sarah 08:42
a bit you're talking about billions of years, right? So what does that mean? A star dies? What

happens? Does it just go dark?

J John 08:49

Well, it's a bit more dramatic than that, but before we get to the grand finale, let's talk about our Sun. Okay, we tend to think of it as this giant ball of fire,

S Sarah 08:58

but which I mean, it kind of is right? Not exactly

J John 09:01

see fire as we know it requires oxygen, right, of course, and there's not a whole lot of oxygen just floating around in space.

S Sarah 09:07

That's true. So what's happening inside the sun, if it's not burning, how is it generating all that energy?

J John 09:14

The Urantia Book tells us that stars are powered by something far more powerful, far more fundamental, the annihilation of atoms, annihilation like completely gone, gone reduced to pure energy. EMC, Foy, you know, right? Einstein's famous equation, exactly, the ultimate example of that at work, matter, even something as tiny as an electron, can be converted into an unbelievable amount of energy. We're talking billions of nuclear bombs every second, every second.

S Sarah 09:42

Wow, that's can't even wrap my head around that. But so all this energy is being generated at the Sun's core, right? Yeah. How does it actually get to us here on Earth? Is it just like beam straight out? Not

J John 09:52

quite remember those x rays we talked about earlier, the ones generated by the annihilation process. They actually play a key role in. And supporting that energy from the core to the surface. So

- S** Sarah 10:02
the same forces that are like blasting these atoms apart are also responsible for carrying that energy outwards. It's like a cosmic two for one deal, you
- J** John 10:11
could say that. But here's where it gets really interesting. The Urantia Book describes this process called random walk that these X rays undergo as they travel random
- S** Sarah 10:21
walk. That doesn't sound very efficient. I mean, for a process that's so vital, shouldn't it be more? I don't know, direct.
- J** John 10:29
It might sound chaotic, but there's an order to it. Imagine a single x ray, right? A photon trying to escape the core, okay, it bumps into a particle, gets deflected, collides again, and on and on. It goes like a cosmic pinball machine, exactly. And it can take hundreds of 1000s of years for a single photon to make its way from the cord to the surface,
- S** Sarah 10:48
hundreds of 1000s of years. So the sunlight we're feeling right now,
- J** John 10:52
it's ancient. It is Isn't that amazing?
- S** Sarah 10:54
It's mind blowing. But once those photons, once they finally break free, then what?
- J** John 10:59
Then they're racing through space at the speed of light, reaching us in a mere eight minutes, from
- S** Sarah 11:04
a cosmic crawl to a light speed sprint Wow Okay that's that's incredible But you mentioned

a cosmic crawl to a light speed sprint. Wow. Okay, that's that's incredible. But you mentioned earlier that stars have a life cycle. So what happens when a star like our Sun, what happens when it reaches the end of its life?

J John 11:18

Remember how we talked about the sun being incredibly dense, yeah, as it burns through its fuel, a star like ours, it'll actually start to expand outward, becoming what's known as a red giant. A red

S Sarah 11:29

giant. How big are we talking? Big,

J John 11:31

potentially big enough to engulf the orbits of Mercury and Venus. Wait,

S Sarah 11:35

seriously? You mean like there's a chance the sun could actually swallow up earth? Well,

J John 11:39

while the Urantia Book doesn't give precise measurements for our Sun's expansion, chances are Earth will likely survive, but it won't be pleasant. Let's just say you'll want to have your sunscreen handy, right?

S Sarah 11:52

A bit of an understatement. So after the Red Giant phase, then what does the sun just stay that way forever, a giant blazing inferno,

J John 12:00

eventually it'll start to shed its outer layers, kind of like a cosmic snake shedding its skin, okay? And what's left behind its core that'll compress into this incredibly dense object called a white dwarf. A white dwarf,

S Sarah 12:12

so it's like the sun goes on this extreme cosmic diet, right? Shedding billions of tons of material.



John 12:18

You could say that. And that white dwarf, even though it's much smaller than the Sun is now, it's still incredibly hot, incredibly dense. Wow.



Sarah 12:24

So like a cosmic Ember just kind of slowly cooling down over billions of years, exactly.



John 12:30

But that's just one way a star can die for stars much larger than our Sun. Well, the end is far more dramatic. We're talking supernovas. Supernovas.



Sarah 12:38

Those are like the rock stars of the cosmos, right, exploding in a blaze of glory. But what causes that is it just a bigger, brighter version of a red giant, expanding. It's



John 12:48

not just bigger and brighter, it's a completely different beast altogether. See, for a star much more massive than our Sun, eventually the core, it collapses in on itself, and that collapse, it triggers this runaway nuclear reaction, an explosion of unimaginable power. We're talking about an event that can outshine an entire galaxy for a brief time.



Sarah 13:07

Talk about going out with a bang. But besides the light show, what else happens during a supernova? Does anything survive?



John 13:13

Actually, supernovas are incredibly important. They're the universe's way of, well, recycling the intense heat and pressure during these explosions, they create elements heavier than iron, elements that wouldn't exist



Sarah 13:26

otherwise, heavier elements, you mean, like gold, silver, exactly. And

J John 13:30
you know, carbon, oxygen, nitrogen, the very building blocks of life as we know it. Wait, seriously.

S Sarah 13:35
So the calcium in my bones, the iron in my blood, it all came from exploding stars in a very

J John 13:41
real sense. Yes, we are literally made of stardust. Okay, that's

S Sarah 13:45
speechless. That is officially the coolest thing I've learned all week. But okay, so a supernova happens. It scatters all these elements across vast distances. How do they eventually come back together? How do they form new stars, new planets? It's like going from a wildly exploding fireworks show to a perfectly choreographed ballet. It's like going from a wildly exploding firework show to a perfectly choreographed ballet.

J John 14:10
I like that. So from supernova to solar system, huh? How does that actually happen?

S Sarah 14:15
It's a beautiful analogy, and you're right. The process is surprisingly elegant. Picture. This a vast cloud of gas and dust remnants from those supernova explosions we were talking about. The Urantia Book calls them cosmic nebulae, and they're scattered all throughout the universe.

J John 14:29
Okay, so we've got these like clouds of stardust just floating around. What's the catalyst? What gets the whole star forming process going gravity? Gravity is the ultimate architect over vast stretches of time, these particles drawn together by their own subtle gravitational pull, they begin to clump together.

S Sarah 14:47
So it starts small, like with tiny particles drawn to each other, kind of like how dust bunnies form under my couch, but on a cosmic scale, exactly.

J John 14:54

And as these clumps grow larger, their gravitational pull, it intensifies. Try. Drawing in even more material. Eventually, this cloud of gas and dust, it collapses in on itself, forming a dense, rotating core.

S Sarah 15:07

And that spinning core, that's what eventually becomes a star. Exactly

J John 15:11

the pressure at the core, it becomes so intense, the temperature's so unimaginably high, that hydrogen atoms, they begin to fuse together, releasing this tremendous amount of energy, and that's

S Sarah 15:20

the moment A Star Is Born, right when nuclear fusion ignites at its core. It's incredible. But what about the planets? How do they form from all this swirling chaos?

J John 15:28

Well, the Urantia Book offers a fascinating explanation for the formation of our own solar system. It describes this close encounter between our nascent solar system, back when it was still forming, and another much larger SAR system called angona,

S Sarah 15:44

a close encounter, like a cosmic near miss. Exactly

J John 15:46

imagine these two swirling systems, each with its own gravitational pull, passing close to one another. The result would be like a gravitational tug of war, flinging these massive amounts of stellar material out into space. So

S Sarah 16:00

our solar system was essentially born from a cosmic fender bender. That's not what I was expecting. It's a pretty

J John 16:05

dramatic origin story, for sure. Yeah. And while the Urantia Book doesn't specify exactly how common these close encounters are, it seems to suggest they play a significant role in the formation of many solar systems. But

S Sarah 16:16

wouldn't an encounter like that just create a lot of chaos? How do planets end up in stable orbits after something like that? That's

J John 16:24

where the incredible balancing act of gravity comes in. Even amidst all the chaos of a near collision, the laws of physics they still apply. They operate with incredible precision. So over millions of years, those scattered remnants, those clumps of matter, they gradually settle into these stable orbits around the newly formed star, finding a kind of gravitational equilibrium.

S Sarah 16:45

It's amazing to think that something as destructive as an ear collision could actually yield to the creation of something as ordered and complex as the solar system. It really

J John 16:53

speaks to the power and the elegance of the universe, doesn't it? But it's important to remember that our understanding of these processes, it's always evolving. What we know today is based on observations, simulations and yes, even texts like the Urantia Book, which can offer these really intriguing perspectives, perspectives that often challenge conventional thinking.

S Sarah 17:12

Absolutely. And speaking of perspectives, I think it's time to zoom out again. I mean, we've talked about our Sun, our solar system, our local system of stars, satania. How does all of that fit into the grander structure of Nebadon? You know, our local universe? Right

J John 17:28

back to the big picture. Well, it turns out that our little corner of the universe is how do I put this a bit off the beaten path? You could say the Urantia Book tells us that satania is located on the outskirts of Nebadon, far from the hustle and bustle of the central regions of our local

universe. So

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Sarah 17:44

we're not exactly at the center of the action, are we not quite

J

John 17:49

but you know, I kind of find that humbling and about you. Here we are, this tiny planet orbiting an average star in a relatively quiet corner of a vast bustling universe, and yet here we are capable of contemplating these cosmic wonders, unraveling the mysteries of our own existence. It's pretty amazing when you think about

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Sarah 18:08

it, it really is and on that note, I think we've reached the end of our deep dive into the cosmic tapestry of Nebadon. It's been, to say the least, a mind expanding journey.

J

John 18:18

I completely agree. It's been a pleasure exploring these amazing concepts with you and

S

Sarah 18:22

to all our listeners out there, thank you for joining us on this cosmic adventure. If you'd like to dive deeper into any of the ideas we've explored today, we highly recommend checking out the Urantia Book. It's a fascinating read full of surprises, and until next time, keep looking up, keep asking questions, and never lose your sense of wonder.