

## *The Urantia Book*

*Introducing a bigger frame in which to think*

Part 1: Universe Frames

Part 2: the Personal Universe

Part 3: a Family Affair

**Part 4: Cosmology**

A – Foundations

B – Mass & Matter

C – Exploding Dark Islands

**D – Ancient Orvonton** ( and a young cosmic web )

## Urantia Book Cosmology...

*“Exploding Dark Islands”*

( 2016 )



Back in 2016, I tried to say something about the sort of physics that would allow **“dark islands”** to explode.

That was a very feeble attempt. So over the next two years, ...

# Urantia Book Cosmology...



## Urantia Book Cosmology

Public ▾ 4 videos • 492 views • Last updated on May 17, 2018



A series of videos exploring the surprising implications of Urantia Book cosmology.



Nigel Nunn

EDIT

SORT BY

- 1 Urantia Book cosmology: 4A - Foundations (v2)  
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Nigel Nunn 13:24
- 3 Urantia Book cosmology: 4B2 - Mass & Matter - part 2  
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- 4 Urantia Book cosmology: 4C - Exploding Dark Islands (v2)  
Nigel Nunn 28:23

... I reworked those ideas into this series of YouTube videos.

For those who haven't seen these,

- In this first part, we look at the Urantia Book's unique, and completely new **foundations for physics**, and see how so-called "**dark mass**" emerges from condensates of space potency.
- In the second, we put ultimatonic foundations under the standard model for particle physics; and see why Dirac's model for the electron – and a Higgs-type mechanism – work so well.
- In the third, we look closely at what happens when the neutrons in a neutron star start to melt;

... and why those **dark islands** (or "stellar mass black holes"), eventually, tend to explode.

## A fresh perspective on...

- foundations

- mass & matter

- dark islands

- Milky Way

home sector  
in an ancient  
superuniverse

For those who've seen those videos, I think you'd agree that the Urantia Book tells quite a tale about mass and matter, and dark islands that explode.

Central to this story are these new foundations – for reservoirs of **energy** and **invisible mass** – that science currently can measure, but can't explain.

This is especially relevant for astronomy; so in this morning's session, what I'd like to do is to test-drive a **script** for this (missing) 4<sup>th</sup> and final video,

... in which we explore what these new foundations might mean for the "**Milky Way**" – our home sector in an ancient superuniverse.

## The story of the cosmos...

eternal purposes

transcendental causation

finite phase

time-dependent evolution

First, I should explain that the authors of the Urantia Book view the cosmos from outside time. Which means they can say some interesting things...

- about **eternal purposes**
- and “**transcendental causation**” (42:2.8),
- and even about Einstein’s “**spooky action at a distance**”.

But this also means that any sequential, time-dependent history they reveal must involve ambiguities, and compromise.

Nevertheless, they explain that reality really **does** involve a crucial, “**finite**” phase: of time-dependent **evolution**.

It’s this finite, or time-dependent side of Urantia Book cosmology that we’ll explore in this 4<sup>th</sup> and final part of our introduction.

For those who may be wondering about how all this physics fits in with the central message of the Urantia Book, about “meanings” and “values”, ...

# *The Urantia Book*

*Introducing a bigger frame in which to think*

*meanings...*  
*values...* { 1: Universe frames  
2: the Personal Universe  
3: a Family Affair

**4: Cosmology**

4A – Foundations

4B – Mass & Matter

4C – Exploding Dark Islands

**4D – Ancient Orvonton** (and a young cosmic web)

... we try to cover (**meanings and values**) back in these first three parts.

And **here** you can see where this morning's session fits in,  
as the final, missing part in my attempt at a ( comprehensive! )  
introduction to the Urantia Book.

## The story of the cosmos...

2 components:

(1) Ancient, organized, and small  
the “grand” universe

(2) Impressively vast, and young.

... levels of outer space

the “master” universe

Ok. In telling their (time-dependent) story of the cosmos, the authors distinguish between two distinct components:

- One is ancient, organized, and (relatively) very small.
- The other is impressively vast. And possibly quite young.

This small part, they call “**the grand universe**” – a massive, disk-like structure at the center of... enormous, nested levels of outer space.

Taken together, these two components, this ancient tiny kernel, and these vast levels of outer space – form the so-called “**master universe**”.

This distinction, between an ancient, organized, “**grand universe**”, and unevolved “**levels of outer space**”, is so... **unorthodox**, that our first step is really just to get a feel for the sort of story the Urantia Book reveals.

And straight away, we bump into a problem.

## *The Urantia Book*

From Paper 101 section 4: **The Limitations of Revelation**

“We full well know that, while the historic facts and religious truths of this series of revelatory presentations will stand on the records of the ages to come, **within a few short years many of our statements regarding the physical sciences will stand in need of revision** in consequence of additional scientific developments and new discoveries.” [ Paper 101:4.2 ]

The authors themselves throw cold water over our expectations

[ quote ]:

**“within a few short years many of our statements regarding the physical sciences will stand in need of revision [...]” (101:4.2)**

**“Will stand in need of revision.”** These papers were written in 1934, and clearly, many of those [quote] **“statements regarding the physical sciences”** simply echo scientific ideas of the day.

## *The Urantia Book*

From Paper 101 section 4: **The Limitations of Revelation**

- 1: The reduction of confusion by the authoritative elimination of error.
- 2: The co-ordination of known or about-to-be-known facts [...].
- 3: The restoration of important bits of lost knowledge...
- 4: The supplying of [...] otherwise earned knowledge.
- 5: Presenting cosmic data in such a manner as to illuminate the spiritual teachings...

[ Paper 101:4.6-10 ]

But anyone who reads this section will have to wonder:  
which of their... **more interesting** scientific statements represent

[quote] “**authoritative elimination of error**” (101:4.5),

or...

[quote] “**otherwise earned knowledge**” (101:4.9).

## *The Urantia Book*

authoritative elimination of error

[ Paper 101:4.6 ]

[ Paper 101:4.9 ]

otherwise earned knowledge

In fact, my motivation for making this set of videos was this carrot they left dangling:

- the possibility for “**authoritative elimination of error**”
- and for “**otherwise earned knowledge**”.

In other words, as we read these papers, we should be on the lookout for:

1. hints about where native physics has gone wrong, and
2. insight about things **beyond** human capacity to **prove** (and thus, possibly, “otherwise earned” ?)

With this in mind, let’s see what we can discover  
about **Orvonton**, our ancient superuniverse.

# The story of the cosmos...

- (1) the grand universe
- (2) astronomical context
- (3) Milky Way & Orvonton {
  - What do astronomers see ?
  - What do the papers say ?
- (4) “cosmological redshift”
  - Age of the universe ?
  - Hubble Parameter ?
  - Microwave background ?

Here's the plan:

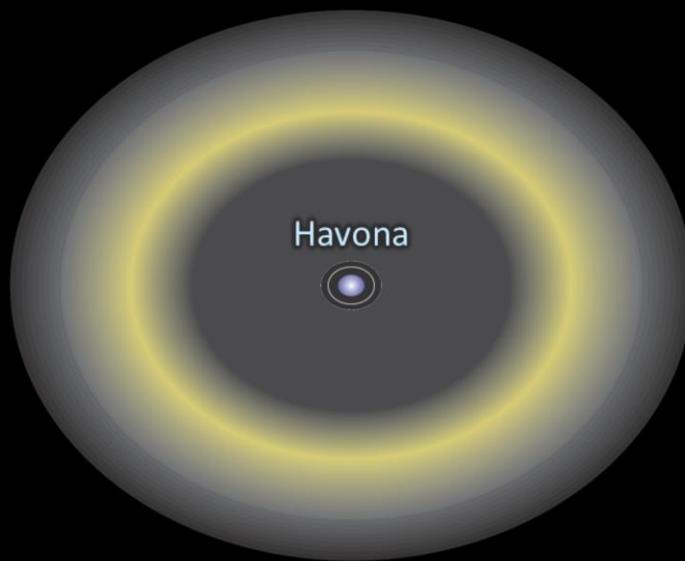
- First we'll look at what the authors mean by “**the grand universe**”.
- Next, we'll try to put this grand universe into some kind of “astronomical context”.
- **Then**; regarding the Milky Way and Orvonton, we'll compare what astronomers actually see... with what the papers say.

One thing we'll find is that the story of Orvonton involves an awful lot of time. Much more than 14 billion years.

So we'll also look at how a simple idea about **redshift** has led cosmologists to believe in a young universe, beginning with a hot Big Bang.

First, the grand universe.

the grand universe



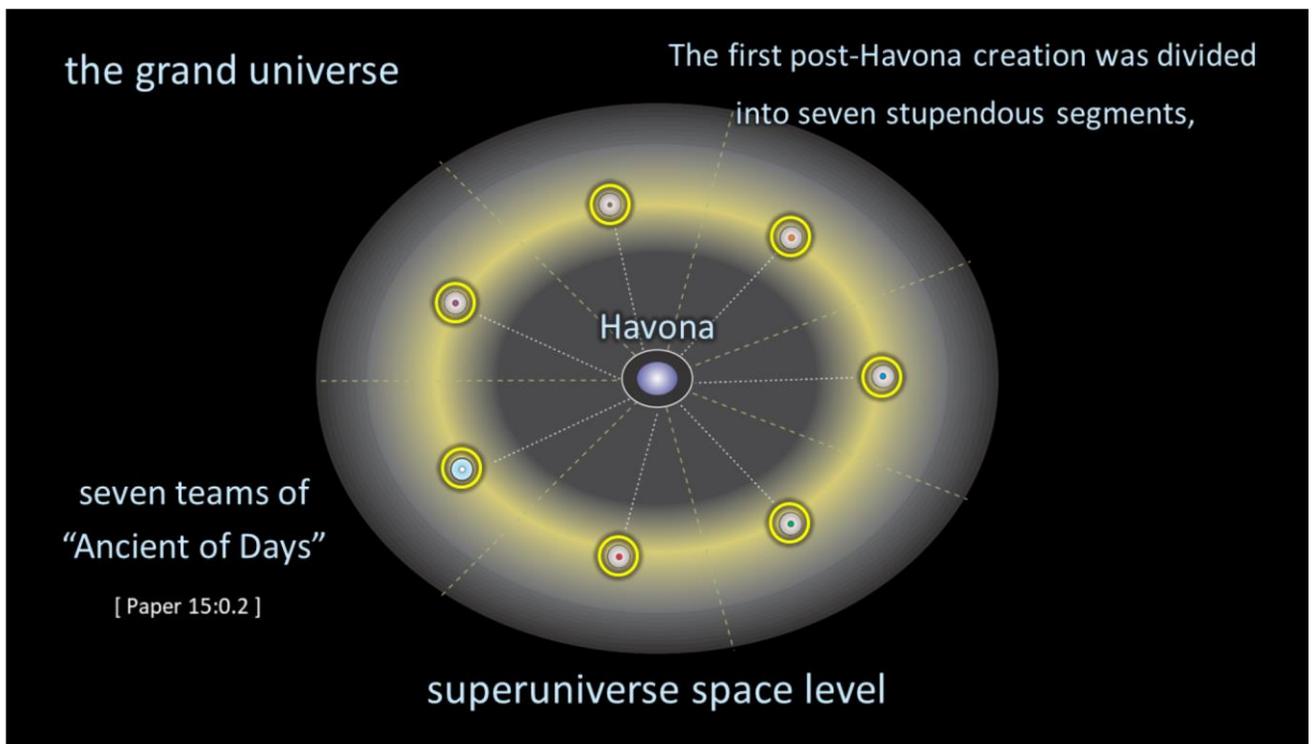
superuniverse space level

Paper 15 opens with the following scene:

- eternal, central Havona,
- surrounded by the “superuniverse space level”.

Now, somewhere in the **archives of Havona**,

there’s going to be an entry that reads...



... something like this:

[ **“And seven small teams of Ancients of Days stepped out.”** ]

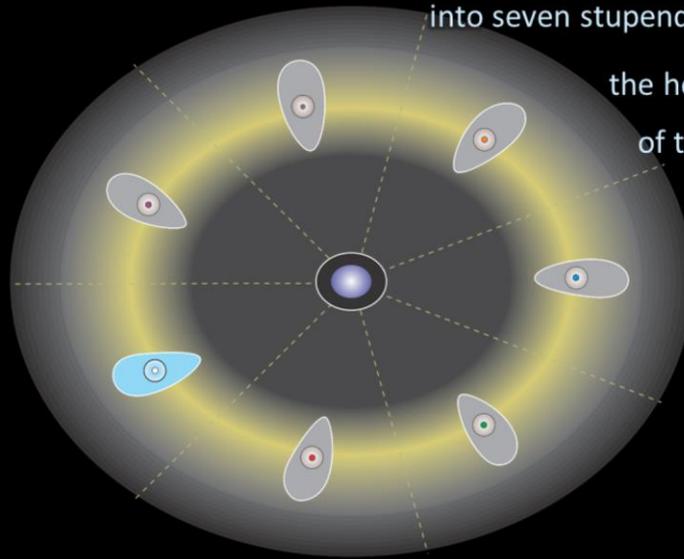
In this unorthodox, Urantia Book cosmology, **“History”** – the time dependent story of the universe – literally begins when seven small teams of **“Ancients of Days”** step out, **from**: eternal Havona... into **Space-Time**; into the shallows of this “continental shelf”, this superuniverse rim of the grand universe wheel.

Question is: **where did they go?** Because wherever they went, those seven places in space mark the centers of rotation for seven superuniverses.

From the start of Paper 15, [quote]:

**“The first post-Havona creation [ meaning: the S.U. space level ] was divided into seven stupendous segments,**

the grand universe



The first post-Havona creation was divided into seven stupendous segments, and the headquarters worlds of these superuniverse governments were designed and constructed.

[ Paper 15:0.2 ]

**... and the headquarters worlds of these superuniverse governments were designed and constructed.” (15:0.2)**

Just to clarify:

Here, they’re talking about the **FIRST** post-Havona creation; at this stage, there aren’t any galaxies in outer space, so... no “cosmic web”.

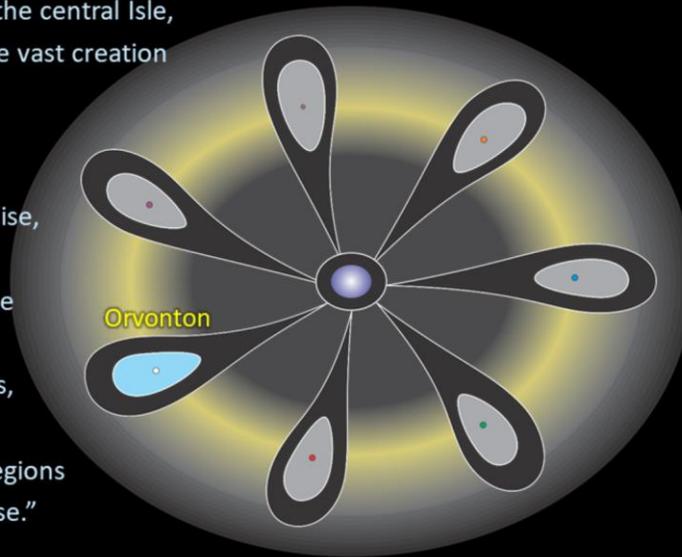
Worth keeping in mind.

“The Seven Master Spirits radiate their influence out from the central Isle, thus constituting the vast creation **one gigantic wheel,**

**the hub** being the eternal Isle of Paradise,

**the seven spokes** the radiations of the Seven Master Spirits,

**the rim** the outer regions of the grand universe.”

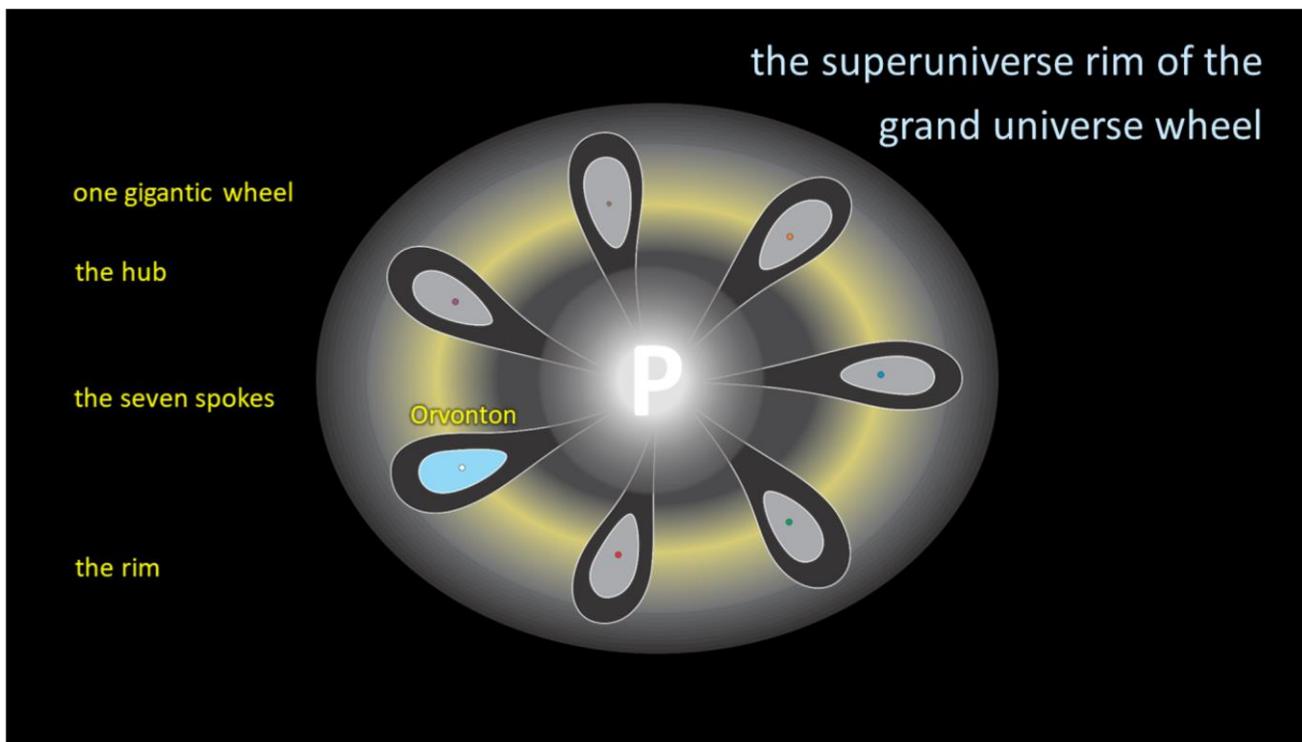


[ Paper 15:0.1 ]

But here's the good bit...

Again, from the start of Paper 15, [quote]:

“... The Seven Master Spirits **radiate their influence** **out...** from the central Isle, thus constituting the vast creation one gigantic **wheel,** the **hub** being the eternal Isle of Paradise, the **seven spokes** the radiations of the Seven Master Spirits, the **rim** the outer regions of the grand universe.” (15:0.1)



The **hub**, the seven **spokes**, the “**superuniverse rim**” of the “**grand universe wheel**”. This is how Paper 15 introduces the **grand universe**:

as seven sub-centers of rotation, in orbit around Havona.

Now, I should emphasise, this is **not** “*the scientific method*”.

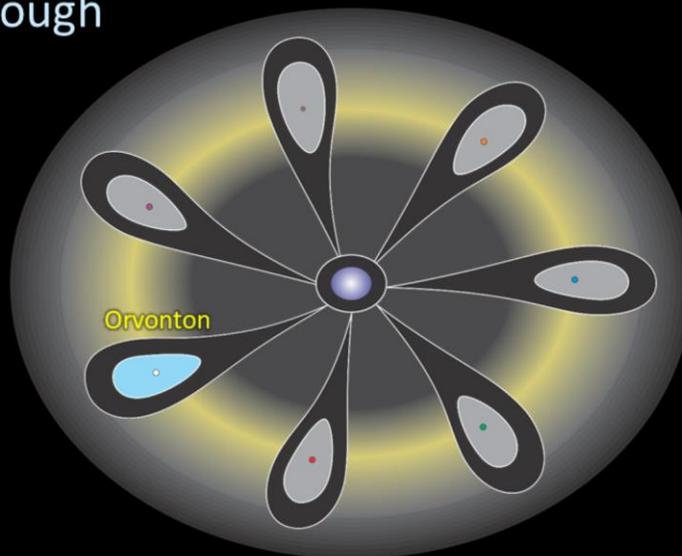
This is not a mathematical model, based on data and facts. It’s just a simple sketch, of a simple, unorthodox idea, presented in Paper 15.

On the other hand, if we’re going to have the gravity of Paradise, acting on an **isolated, rotating ring** of **emergent** energy, for a few **trillion** years, then maybe something like this is what we should expect?

Think about it: seven Master Spirits,

- imposing characteristic systems of energy and mind,
- on their **slice** of the grand universe wheel,
- exposed to the **distorting tidal forces** of the source and center of gravity.

### 3D: fly-through



*“Pause to consider...”* the central universe is only 1 world thick!

A feature of this scheme is that it makes the grand universe **flat**.

Flat in the sense that Saturn’s rings are flat; forced – by gravity and angular momentum – into an almost 2 dimensional disk.

[ **3D Blender fly-through...** ]

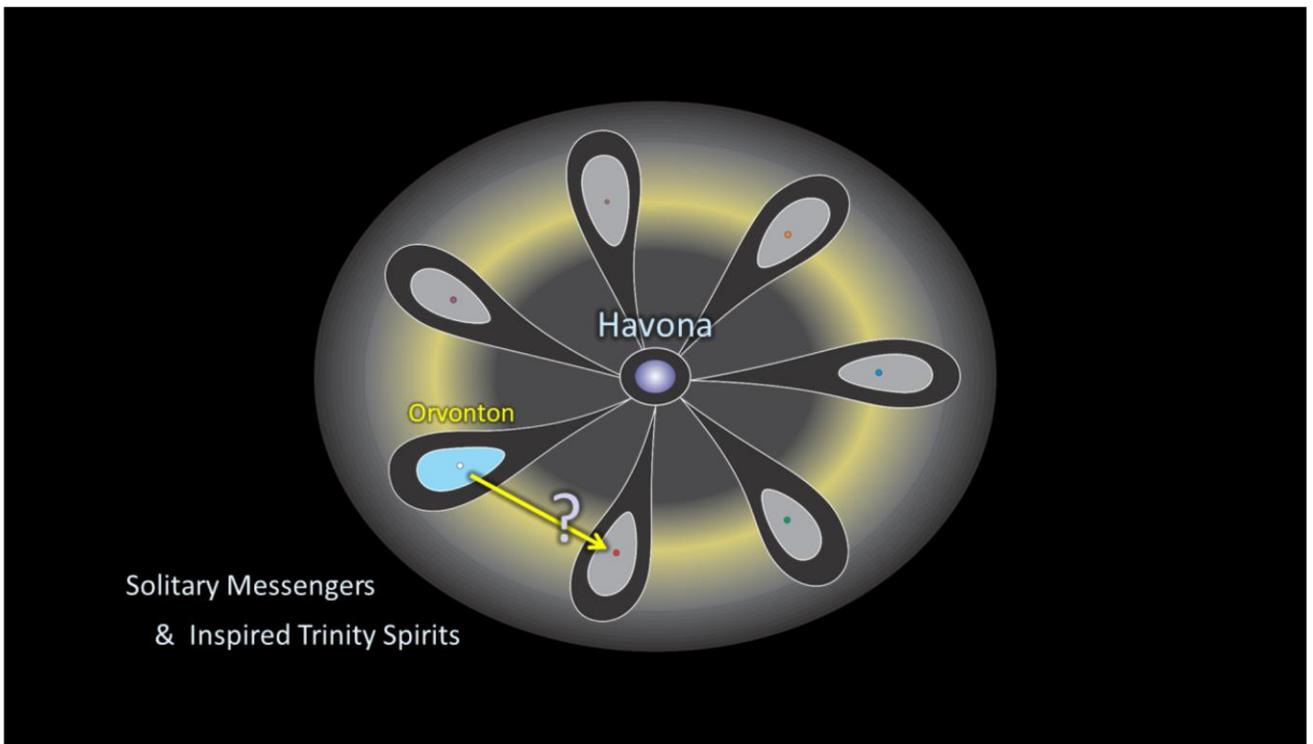
For example: [**as we zoom in**] consider the central universe.

The orbits of those one billion Havona worlds are all in the same plane, so when you think about it (ignoring the **dark gravity belts**), the central universe is only one world thick.

And thus when looking from the side, almost impossible to see.

One world thick!

Likewise (as we’ll see), by aligning these **7** superuniverse systems in the same shared superuniverse plane, this entire grand universe (at least its visible, galactic material) becomes only as thick as a **single spiral galaxy**, seen edge on.



One more thing. In paper 23, there's a strange comment about **direct** travel between superuniverse capitals. From paper 23:2.15 [quote]:

**“Solitary Messengers are the only available type of spirit intelligence – aside, possibly, from the Inspired Trinity Spirits – that can be dispatched from the headquarters of one superuniverse directly to the headquarters of another. [...]”** (23:2.15)

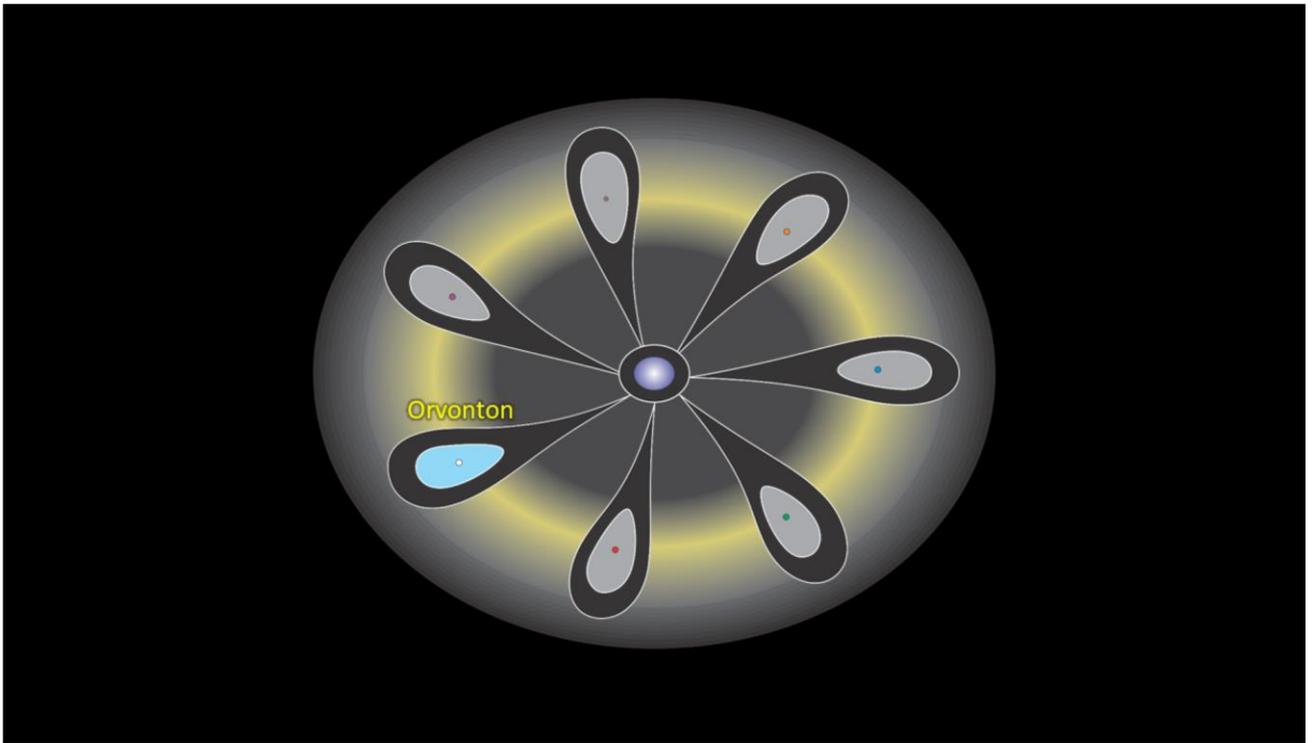
( All others have to go the long way, via Havona. )

I mention this because these two types of being (Solitary Messengers and Inspired Trinity Spirits) are said to maintain [quote] an:

**“organic association with the Transcendentals and the Architects of the Master Universe.”** (31:9.13)

Which for me, raises a question: are these seven superuniverses isolated not just in **space**, but also in some **transcendental** way?

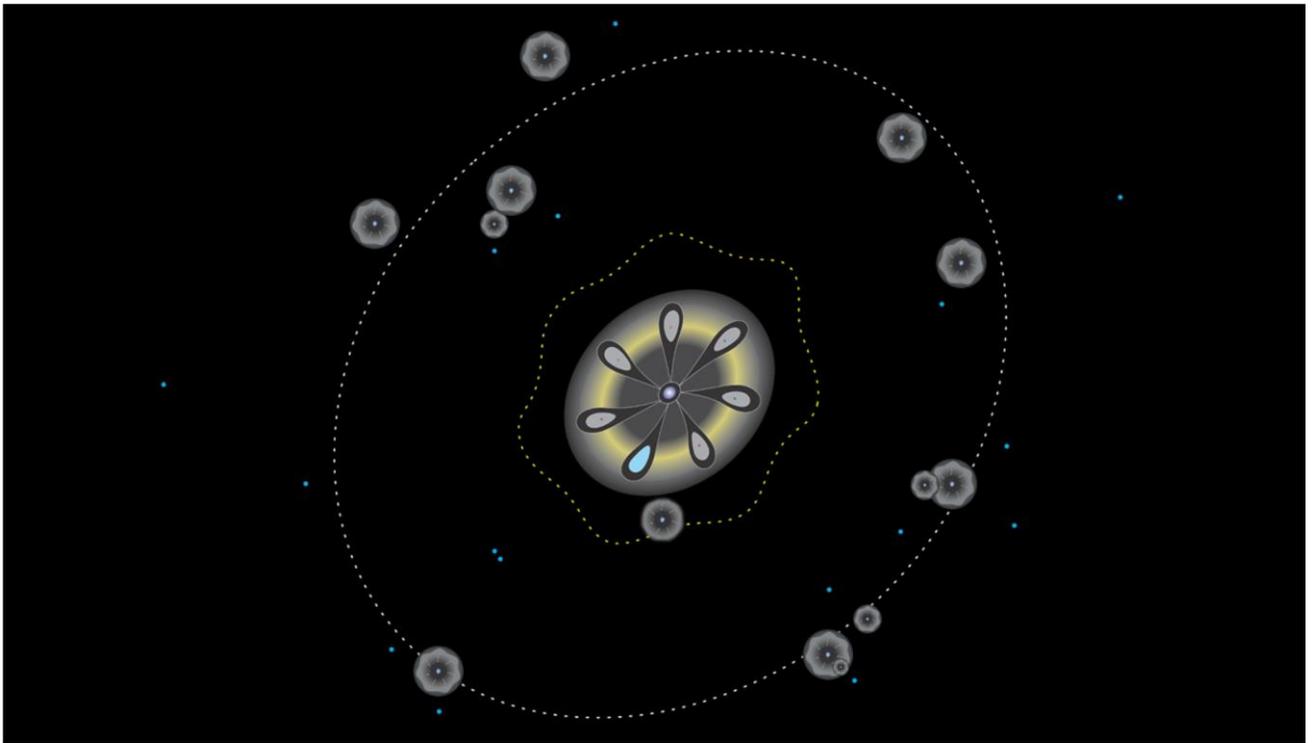
[ Something to consider. ]



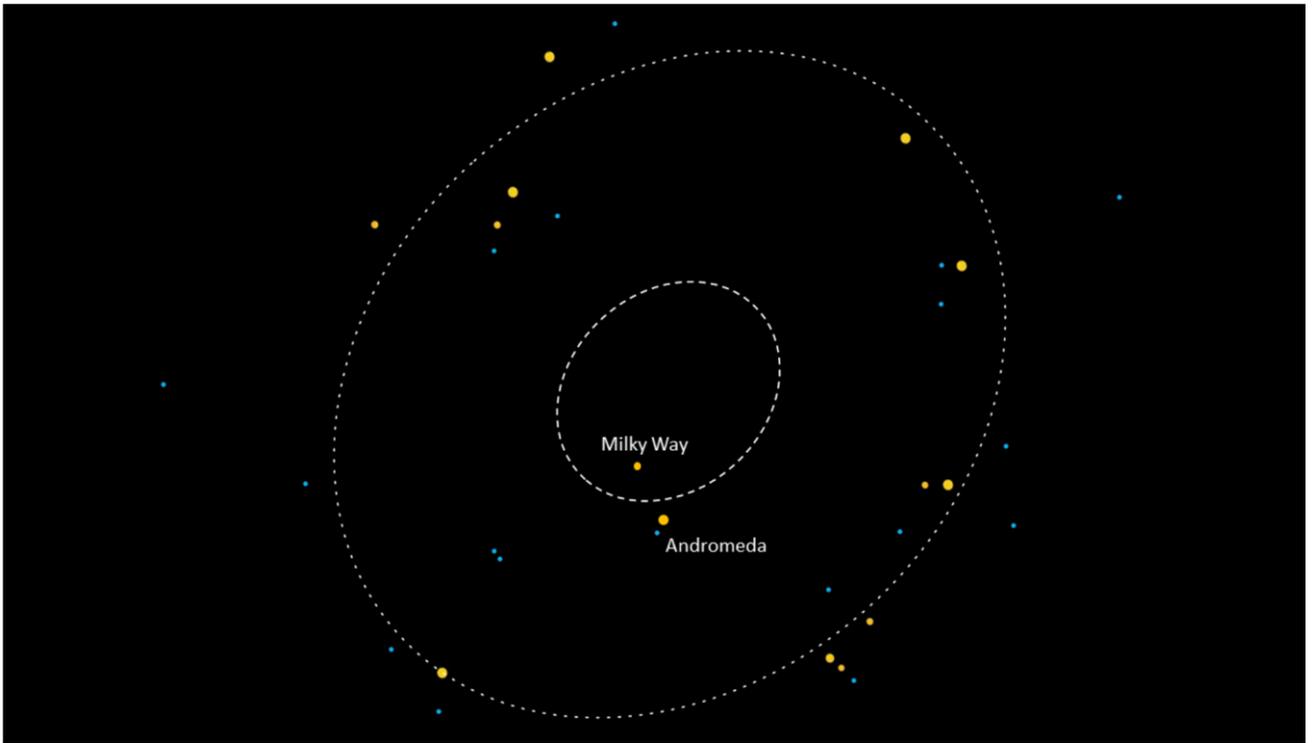
Of course, the big question here is:

Can we connect a scheme like this with what astronomers actually see?

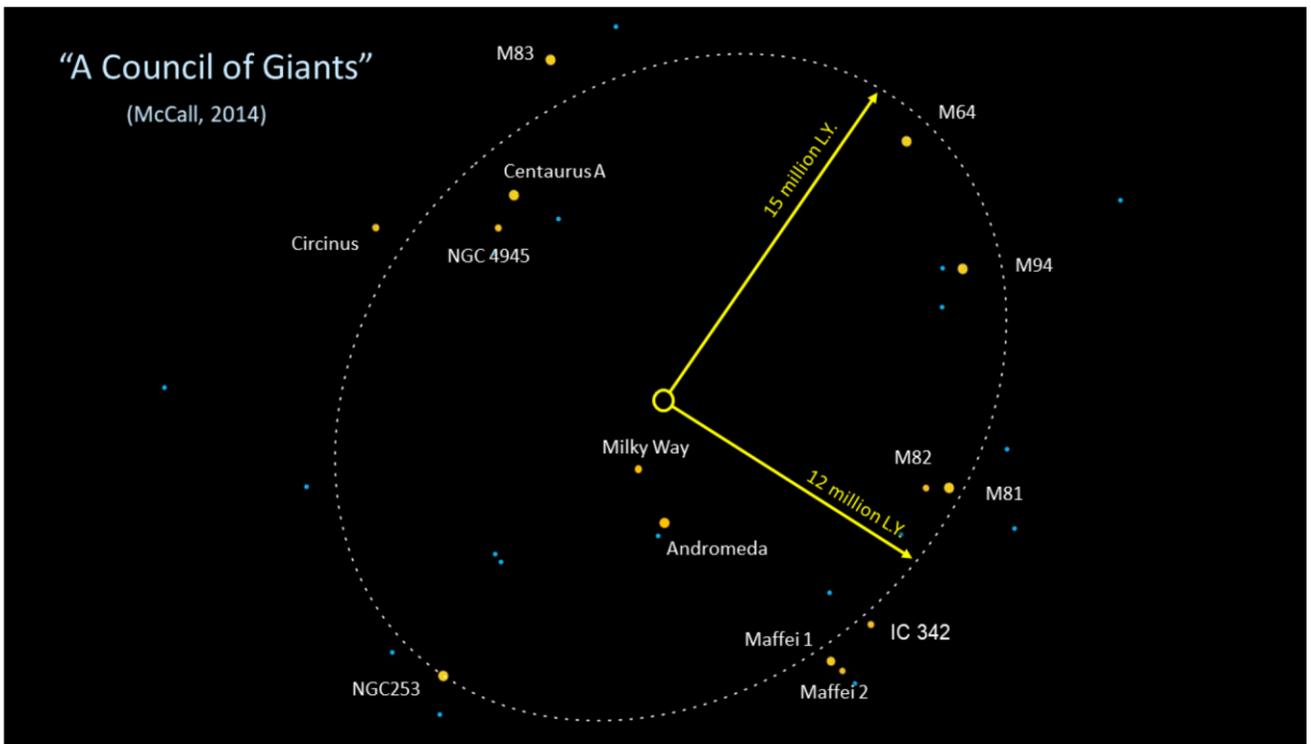
Fortunately, ...



... the groundwork may already have been done.



As we're about to see, astronomers have mapped out what looks like an ideal place in space to put this sort of **"grand universe wheel"**.



In 2014, astronomer Marshall McCall presented a study of an apparent ring of **12** galaxies, to which he gave the catchy name, “**A Council of Giants**”.

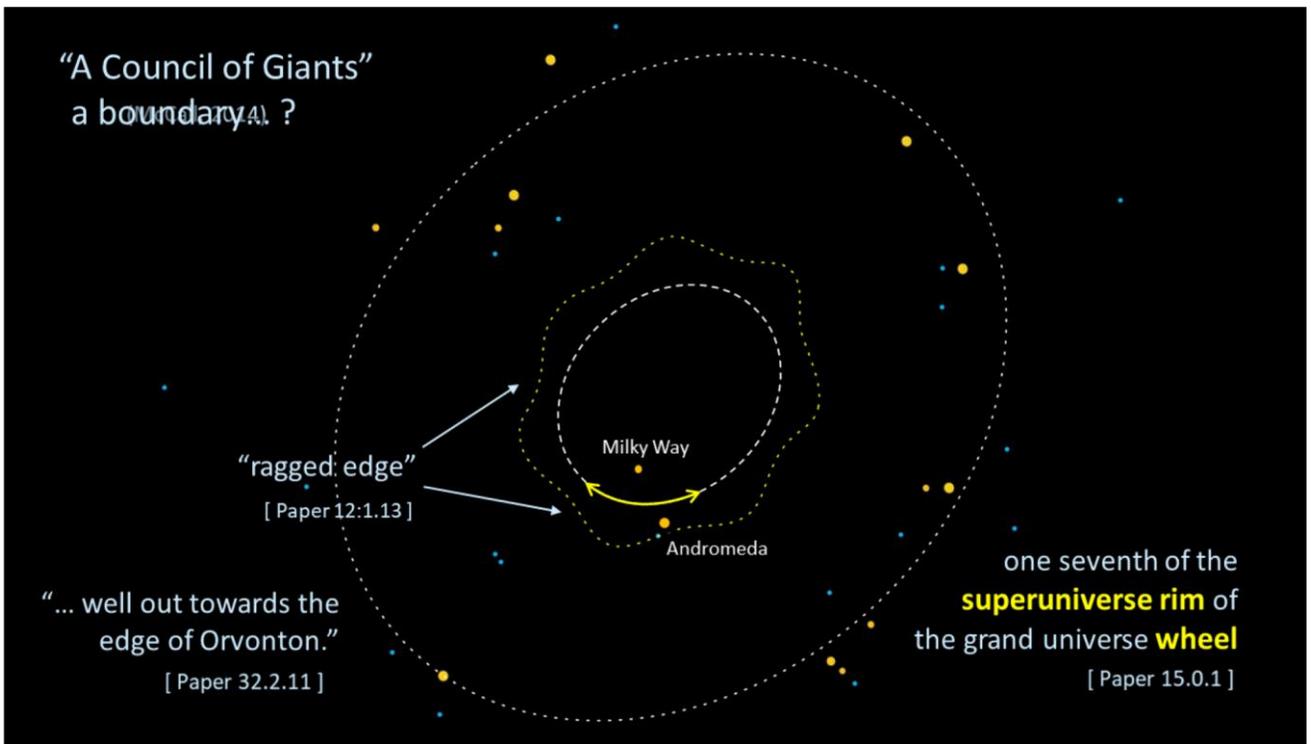
As you can see, the Milky Way and Andromeda are near the middle of this ring, just off center.

The surprise here, and the point of McCall’s paper, is that, relative to each other, his 12 giant galaxies seem to be... bound together, as if holding formation in this **persistent elliptical ring**.

Now, to native astronomers, this “Council of Giants” is just one of those things, a chance arrangement due to gravity.

But in a Urantia Book scheme, it may be something more.

In paper 32 section 2, the author states that our place in the Milky Way...



... is [quote]:

“well out towards the edge of Orvonton” (32:2.11).

Now, in the Urantia Book, all references to **Orvonton** are associated with the **Milky Way**, so it seems natural to associate Orvonton with structures in here, close to the Milky Way; **not** with this more distant ring of galaxies (or with anything further out).

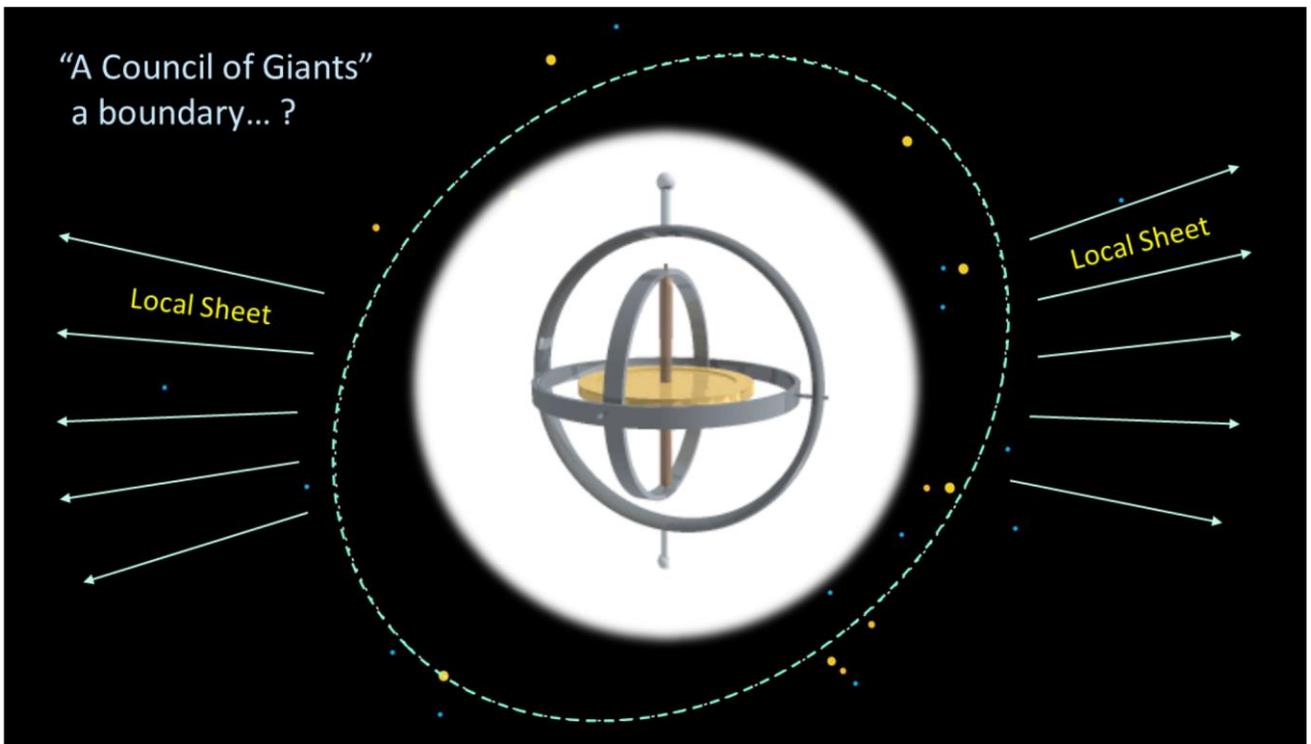
Also, if Orvonton is going to span one seventh of the “**superuniverse rim**” of that “**grand universe wheel**” (as we saw earlier), then it’s tempting to put this grand universe wheel right about here;

its [quote] “**ragged edge**” running something like this... (see 12:1)

Which would make Andromeda one of those objects [quote]

“**on the fringe of Orvonton and [...] traveling along with us**” (12:2.3, 15:4.7).

And it would make this **persistent elliptical ring**,  
McCall’s “Council of Giants”, a boundary...



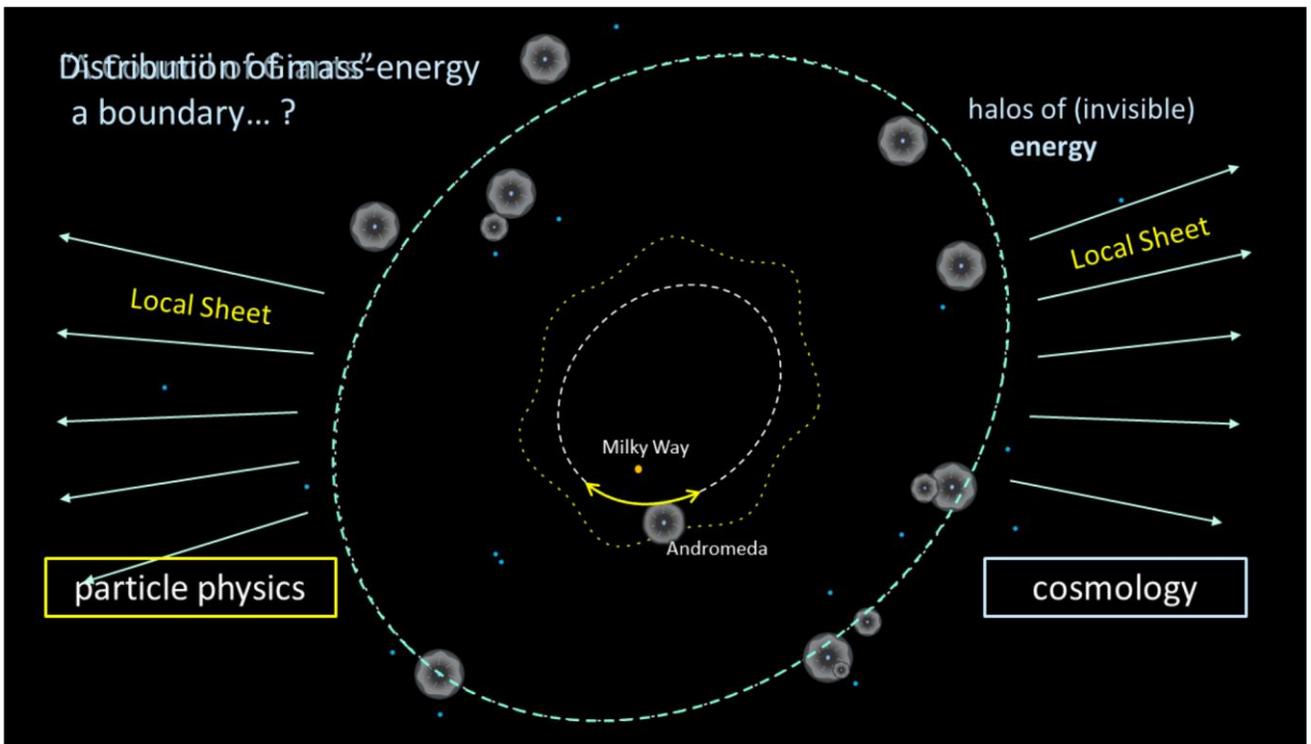
... the inner fringe of the first of those nested “levels of outer space”; what astronomers now call... “**the local sheet**”.

For those wondering about the issue... of the alignment of this grand universe wheel with respect to this local sheet, imagine a multi-gimbal gyroscope:

[ [Multi-gimble-gyro.gif](#) ]

For stability, I think of the outer space levels not only rotating **around** the grand universe, but also precessing **OVER** – reinforcing the idea of the grand universe as: **stable central kernel** for the future master universe.

So what’s missing from this picture?



To make this plot more *realistic*, more consistent both with current theory and with the Urantia Book, we need to add something that we can measure, but can't see:

A distribution of mass-energy.

Halos and dark disks – of something “invisible”, but full of energy. And thus mass. And thus gravitational response.

About these halos and dark disks, back in **Part 4A** I mentioned a famous disagreement between two predictions – one from particle physics, one from cosmology – to do with this distribution of energy in space.

Since this is central to our story, I'll repeat the highlights.

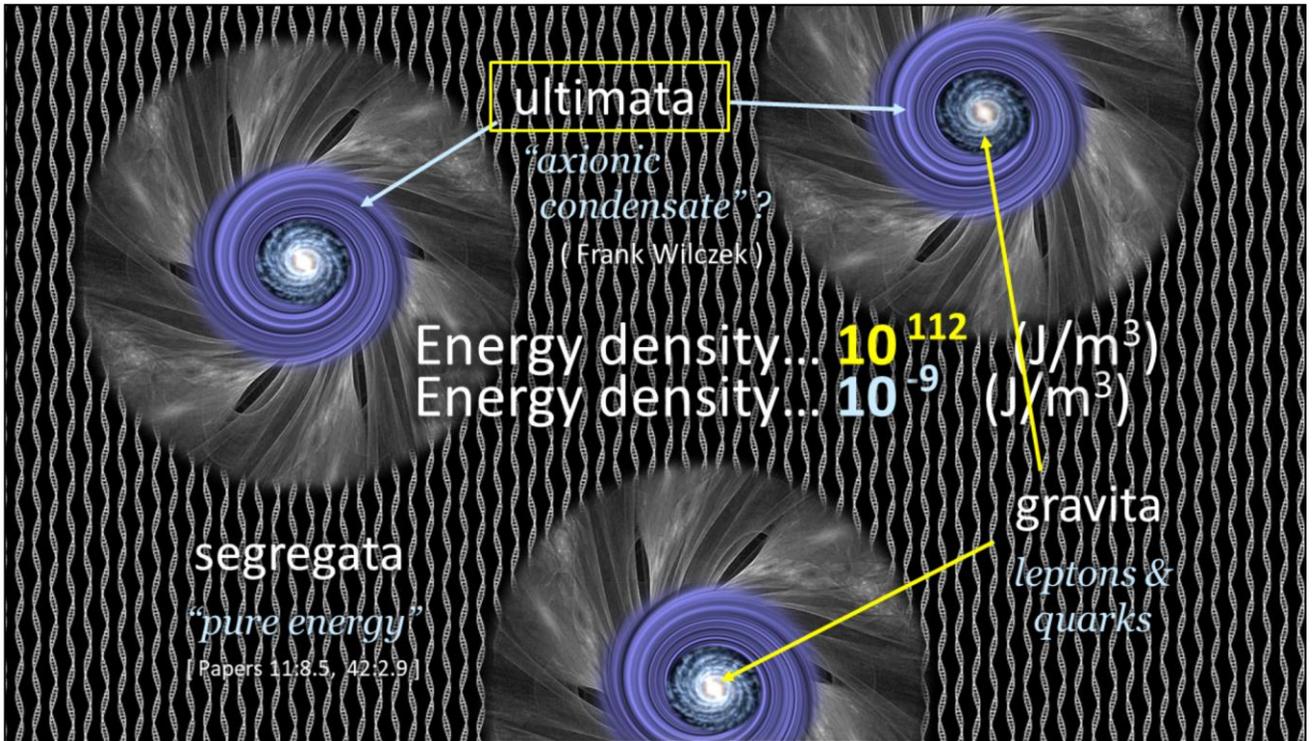
Cosmologists tell us that ...



Energy density...  $10^{-9}$  (J/m<sup>3</sup>)

... for their models of the universe to work, space...  
needs to be mostly *empty*;

But particle physicists tell us that,  
to make their quantum field theories work, ...



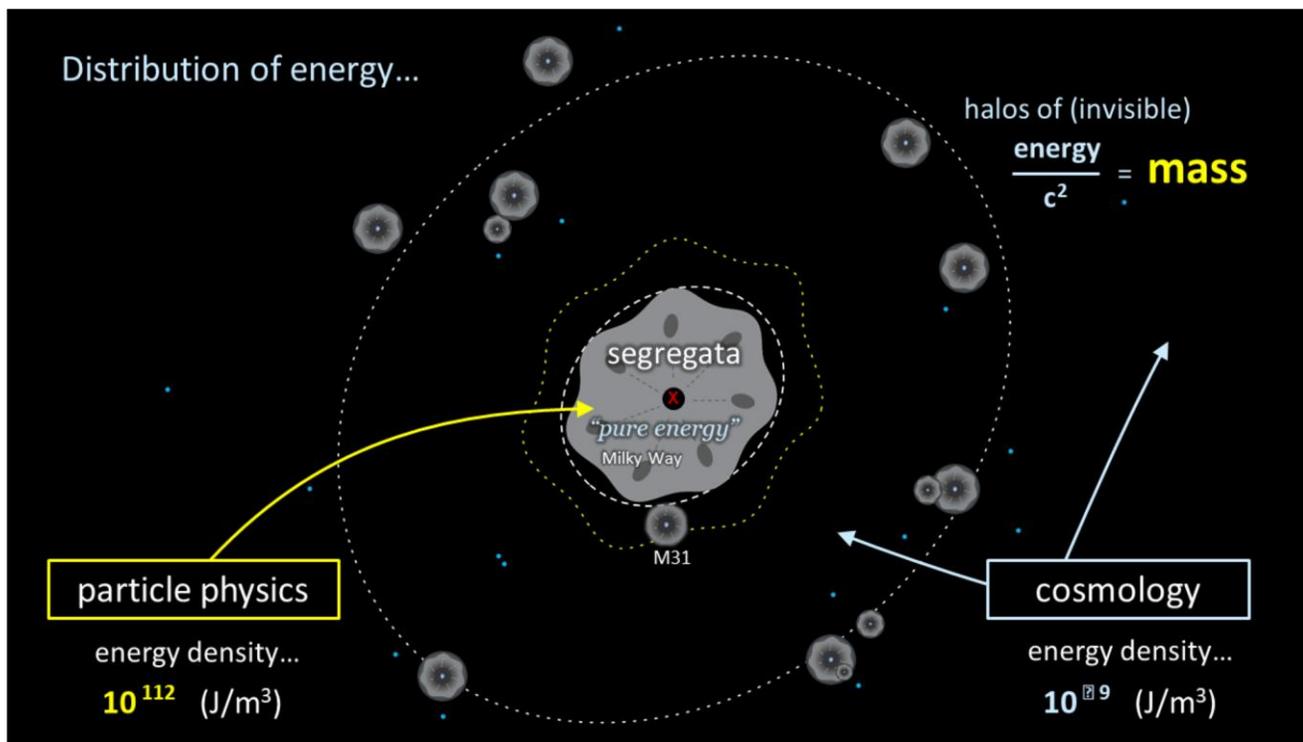
... space needs to be surprisingly **full**;  
 implying some enormous **energy density**, filling all space.

And as we saw in Part 4A, the Urantia Book resolves this by **localizing** the distribution of energy; as **isolated**, energy-dense cyclones of so-called “**segregata**”, or “**pure energy**” (11:8.5)

and, ... as invisible, rotating, **superfluid** disks of emergent **ultimata**, in which **galaxies of gravita** evolve.

[ For the experts, I think this is where we’ll find Frank Wilczek’s “**axion**”;  
 ... **emergent ultimata** as “**axionic condensate**” ? ]

For more on this, see that YouTube video, [ **Part 4A** ].



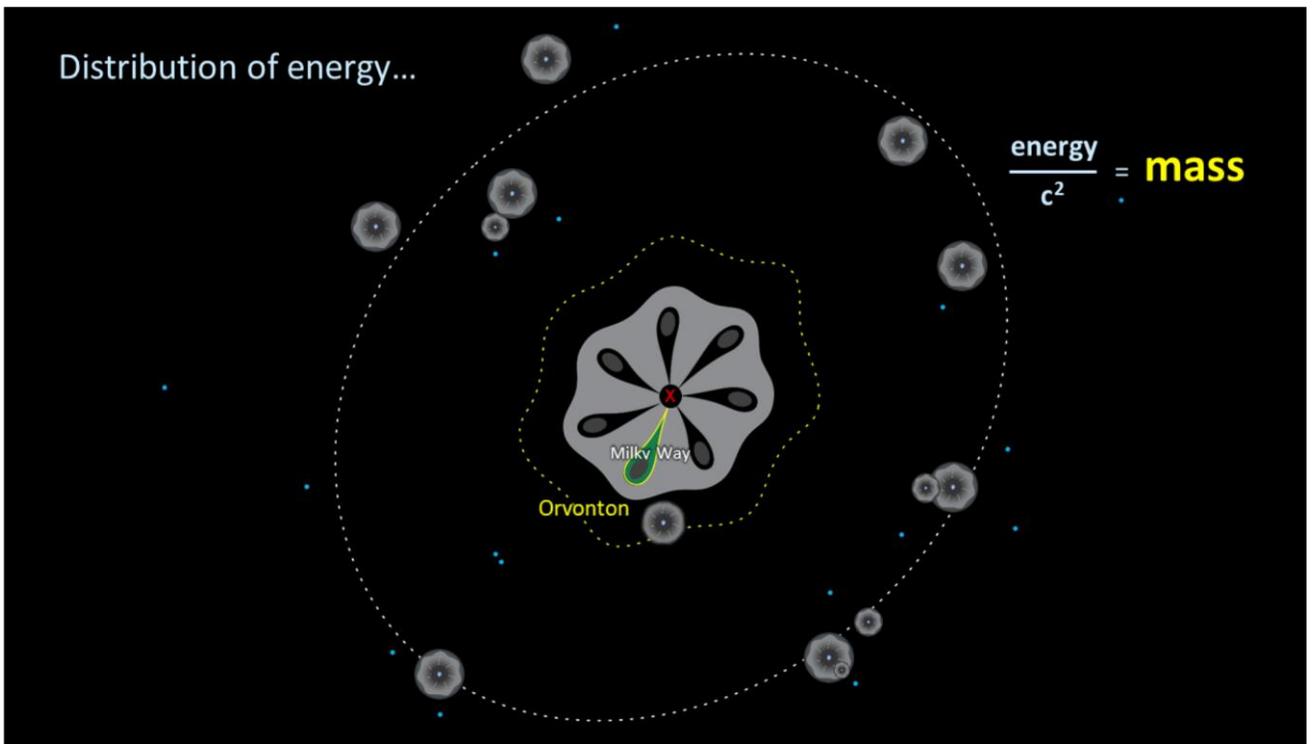
So in these empty places, between islands of “pure energy”, [cosmologists](#) find the sort of emptiness that they need.

But in here, within this “grand universe wheel” – where [quantum field theorists](#) have their labs – we find the sort of density of energy their quantized field theories predict.

So here we bump into our first real twist in the standard cosmological tale:

- o This energy-dense grand universe wheel,
- o an **island continent** of “pure energy”, at the very center of space,
- o Ancient. Organized. ( And [inhabited](#). )

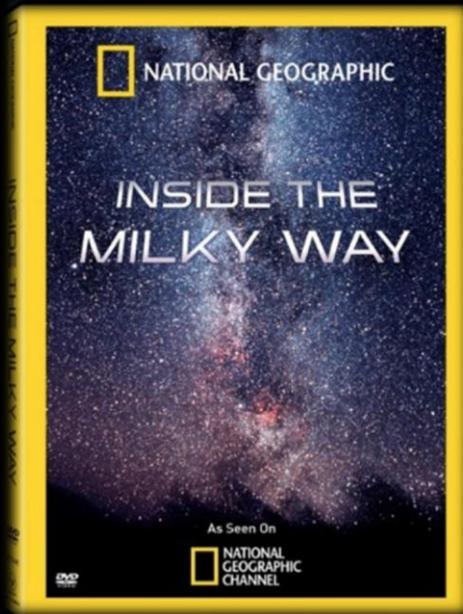
Exactly what we need to make sense of the Urantia Book’s unorthodox cosmology.



As we'll see, this “**revelatory**” background allows us to tell a much more interesting story...

about our “spoke” in this grand universe wheel,  
and about our ancient spiral sector of stars, the Milky Way.

But first, let's see what the scientific method has revealed.  
What do we actually know about the Milky Way?



## “Inside the Milky Way”

National Geographic  
(2010)

In 2010, *National Geographic* released a 2-hour documentary,

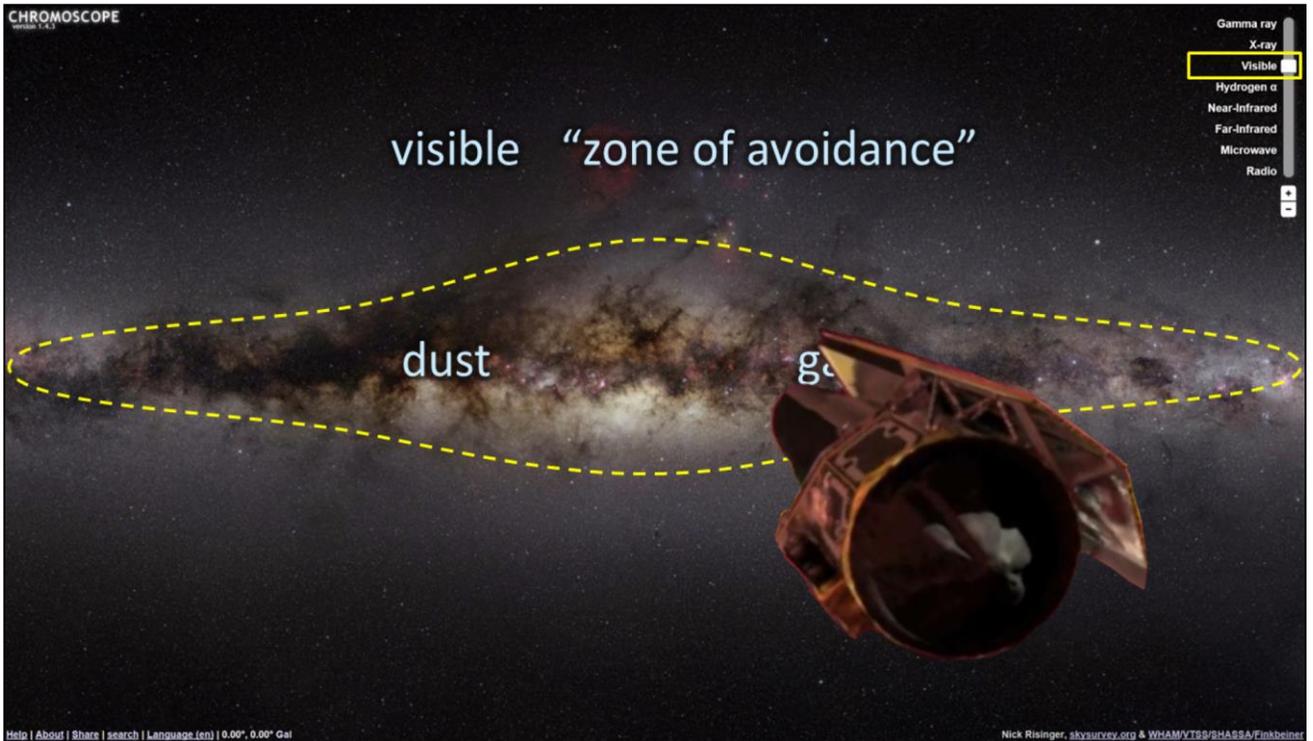
### ***“Inside the Milky Way”.***

This brought together everything we then knew, and assumed, about our home system of stars.

To help set the scene, here’s a 60 second clip from that documentary:



[**Movie**] James Bullock – “The Milky Way, we believe, is a spiral galaxy. [...]”



About these clouds of dust and gas, what we see depends on how we look.

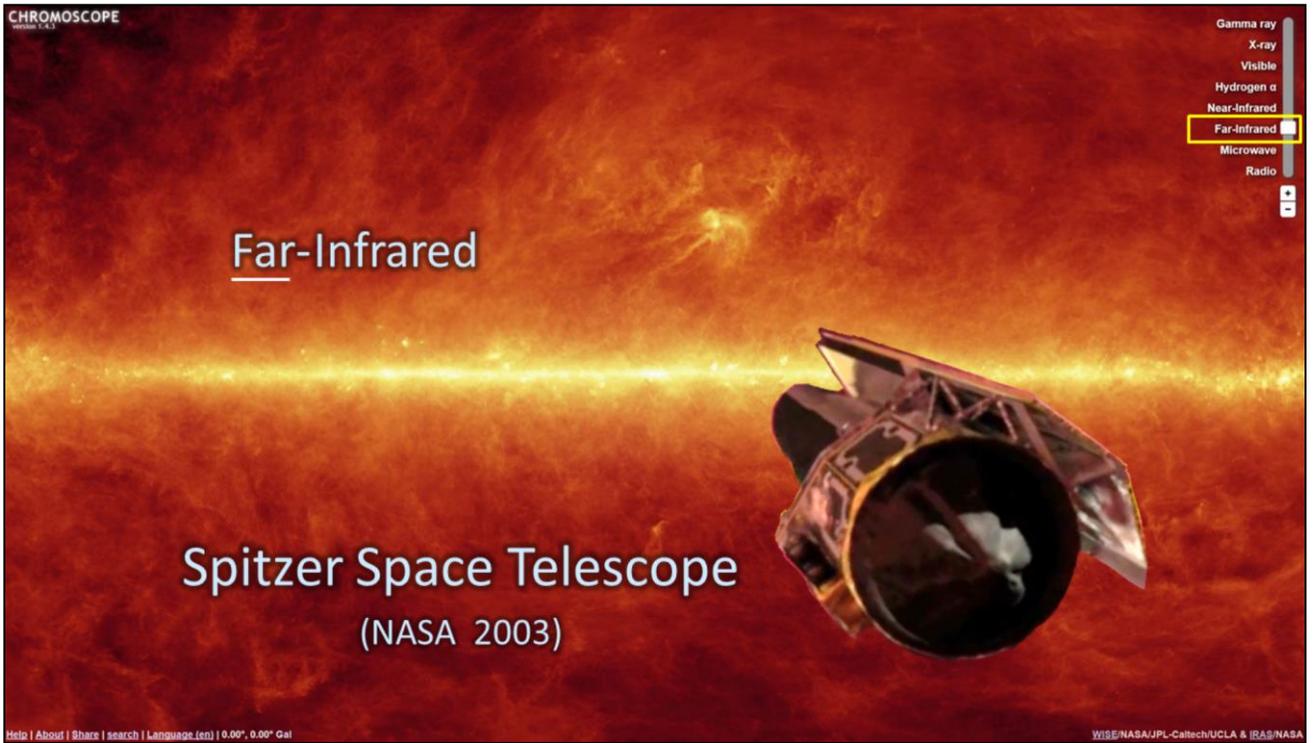
When using **visible** light, we see something like this.

Which, for poets or philosophers, might be just fine.

But for astronomers, it's just frustrating. Until recently, they had no way to see through all this dust and gas, so astronomers actually avoided looking at this entire part of the sky.

Thus (for astronomers) this region became... "**the zone of avoidance**".

But in 2003, NASA launched the **Spitzer** Space Telescope...



... and Spitzer was built to look in the infrared.

In astronomy, what we see really does depend on how we “look”!

And this is what we see when we look at that “zone of avoidance” ...  
in the infrared.

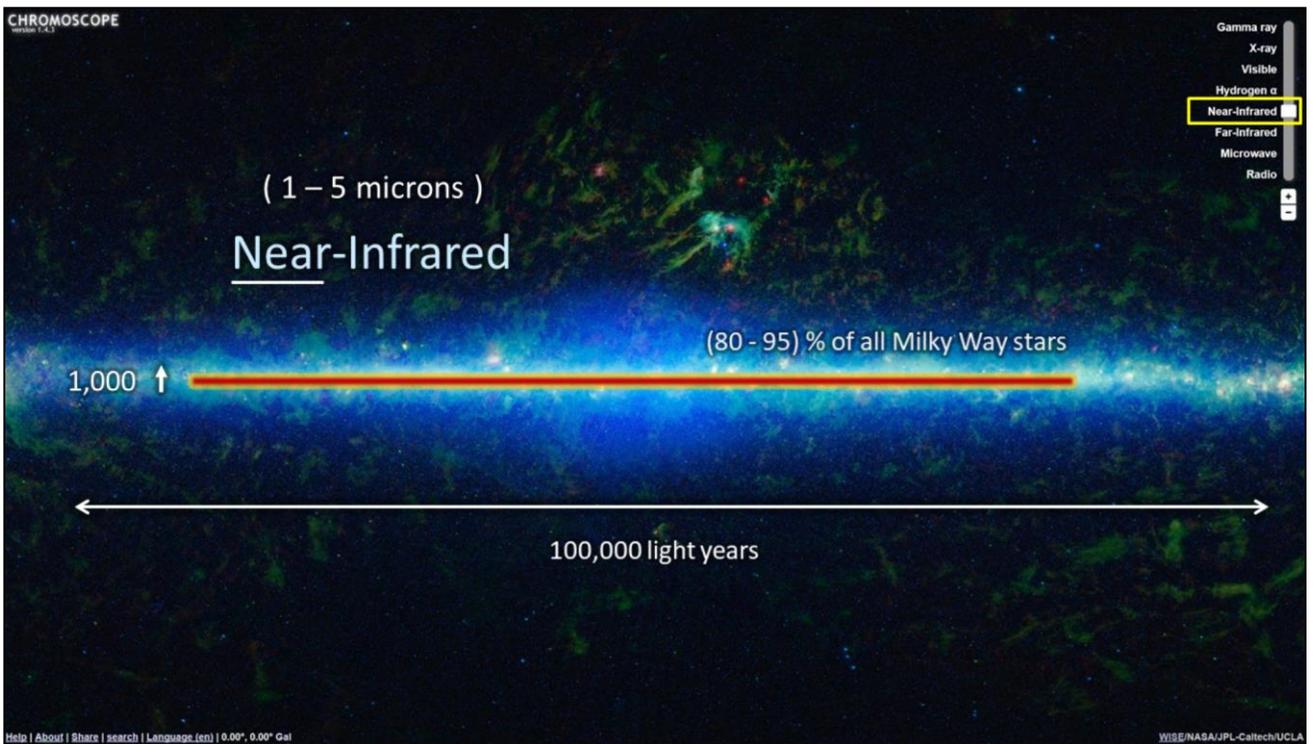
Actually, this is the “**far infrared**” ...

<http://www.ipac.caltech.edu/outreach/Edu/Regions/irregions.html>

<http://www.spitzer.caltech.edu/info/277-Fast-Facts>

Spitzer: **3 - 180 microns**.

REGION	microns	WHAT WE SEE
Near-IR	1 - 5	Dust is transparent
Mid-IR	5 - 30	Dust warmed by starlight
Far-IR	30 - 300	Emission from cold dust



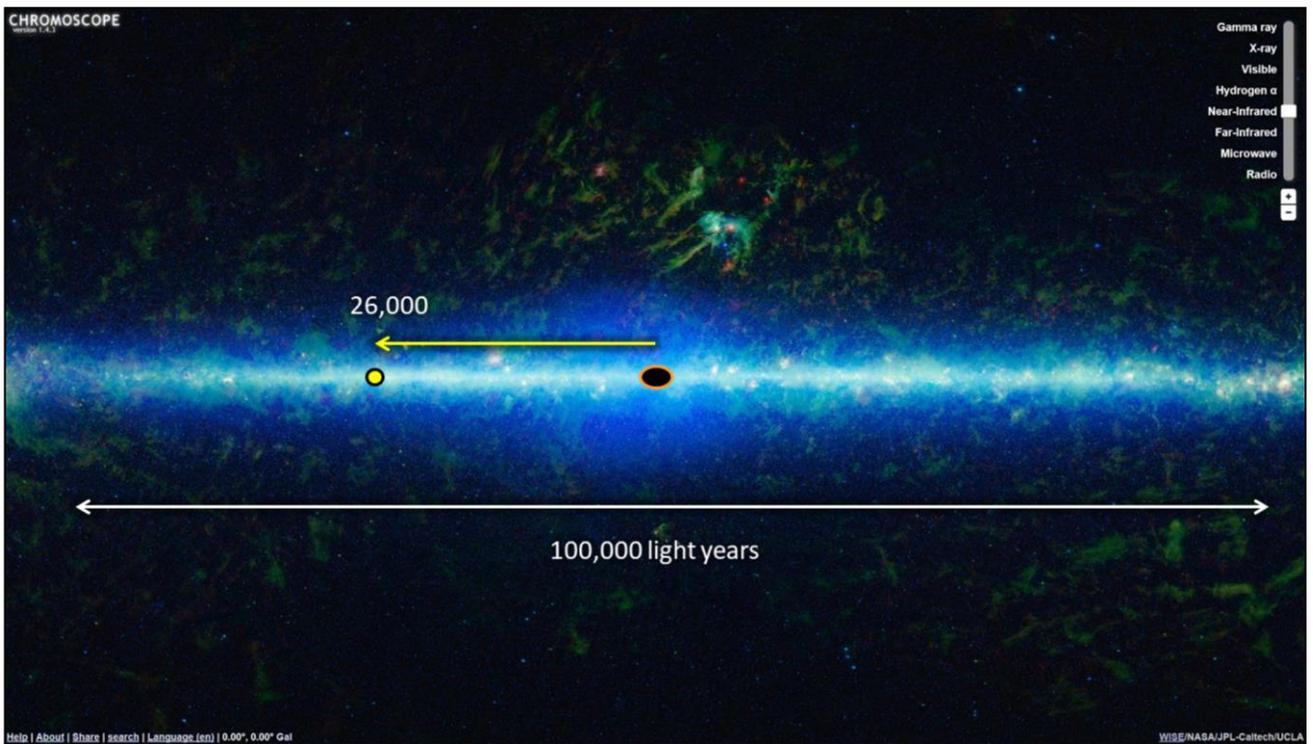
Even better is the “**near infrared**”. At these wavelengths (1 - 5 microns), all that **cold** dust and gas becomes transparent, and we get a better view of the actual distribution of stars.

Now we’ve known for some time that this belt of stars is at least 100,000 light years wide. What’s not so well known is the **actual distribution of stars** within this Milky Way.

Which turns out to be... surprising.

Astronomers now estimate that up to **95%** of the Milky Way’s hundreds of billions of stars lie in a “**thin disk**” less than 1,000 light years thick...

[ For the video, I’ll add a fly-through to show how **THIN** this “thin disk” is. 100,000 LY wide by 1,000 LY thick, that’s a ratio of 100:1; Think: geometry of a DVD ! ]



Ok. So what would this system look like from above?

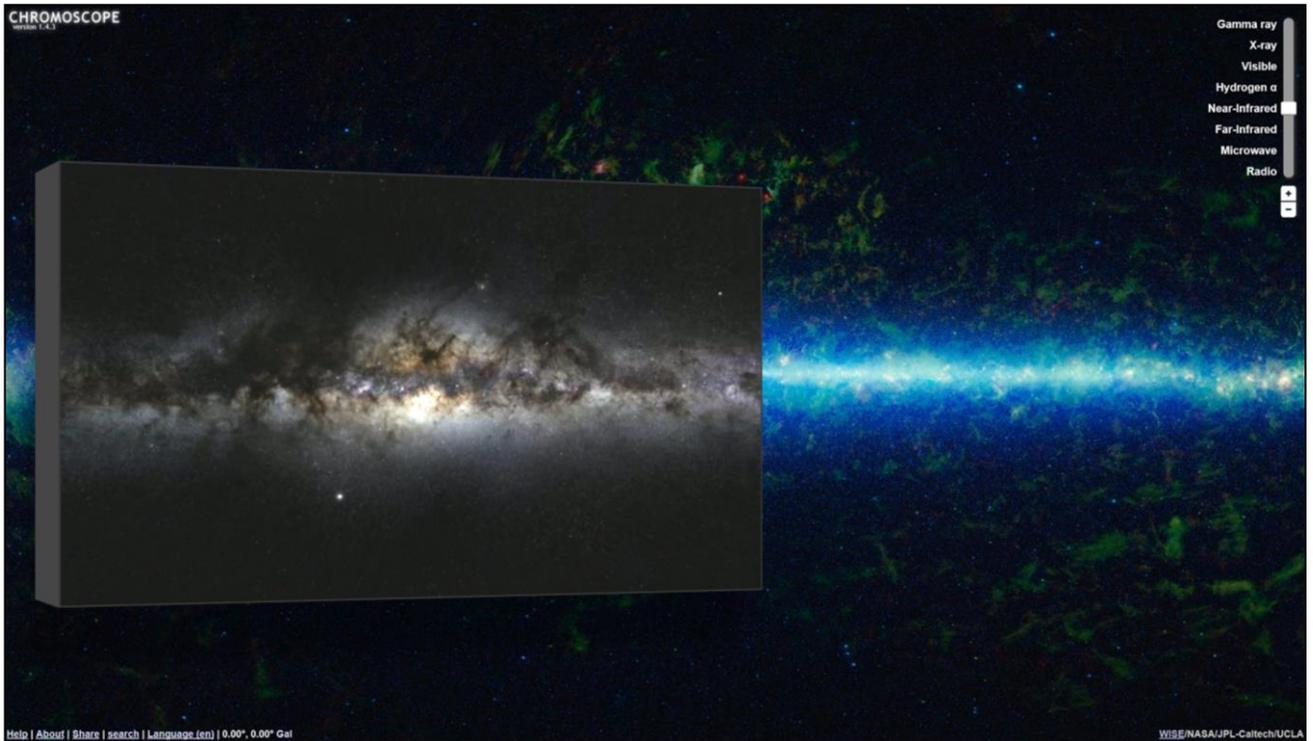
Here we have a problem. Astronomers have worked out that our Sun sits about 26,000 light years from the center of our spiral of stars.

However, it's right in the middle of the dense midplane of the disk.

And as James Bullock said,

*“we can't just fly up above the disk to get bird's eye view”.*

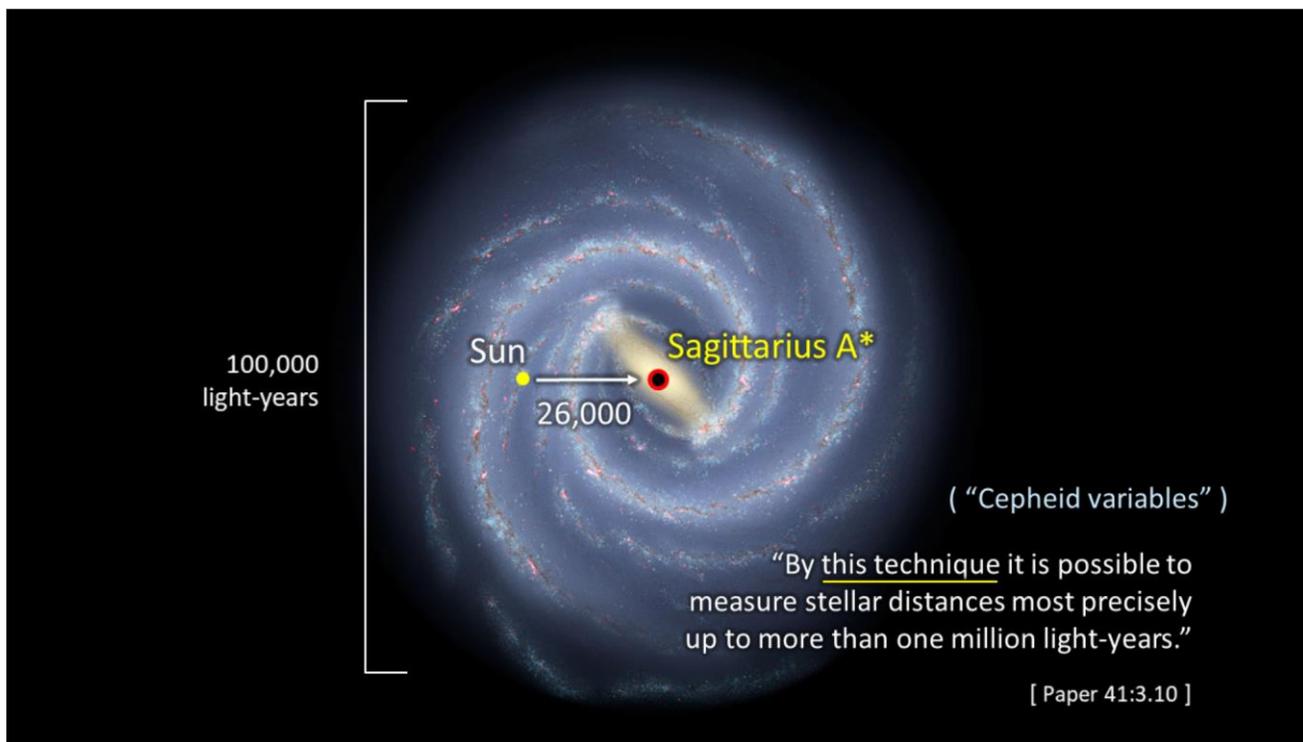
For us, trying to map the Milky Way is like... a bit of **peperoni**, in a very, very **BIG**, and very, very **THIN pizza**, trying to map the pizza in which it's stuck; as astronomer Bob Kirshner explains:



[**Movie**] Robert Kirshner – “It’s something like a pizza. [...]”

[**Movie**] “[...] But we can look at other galaxies,  
and see what they look like.”

By looking at other galaxies, and by trying to map the Milky Way’s  
spiral arms, ...



... astronomers now think that, from above, the Milky Way would look something like this: our Sun would be about here; and here’s that center of rotation, about 26,000 light years away, we call “**Sagittarius A-star**”.

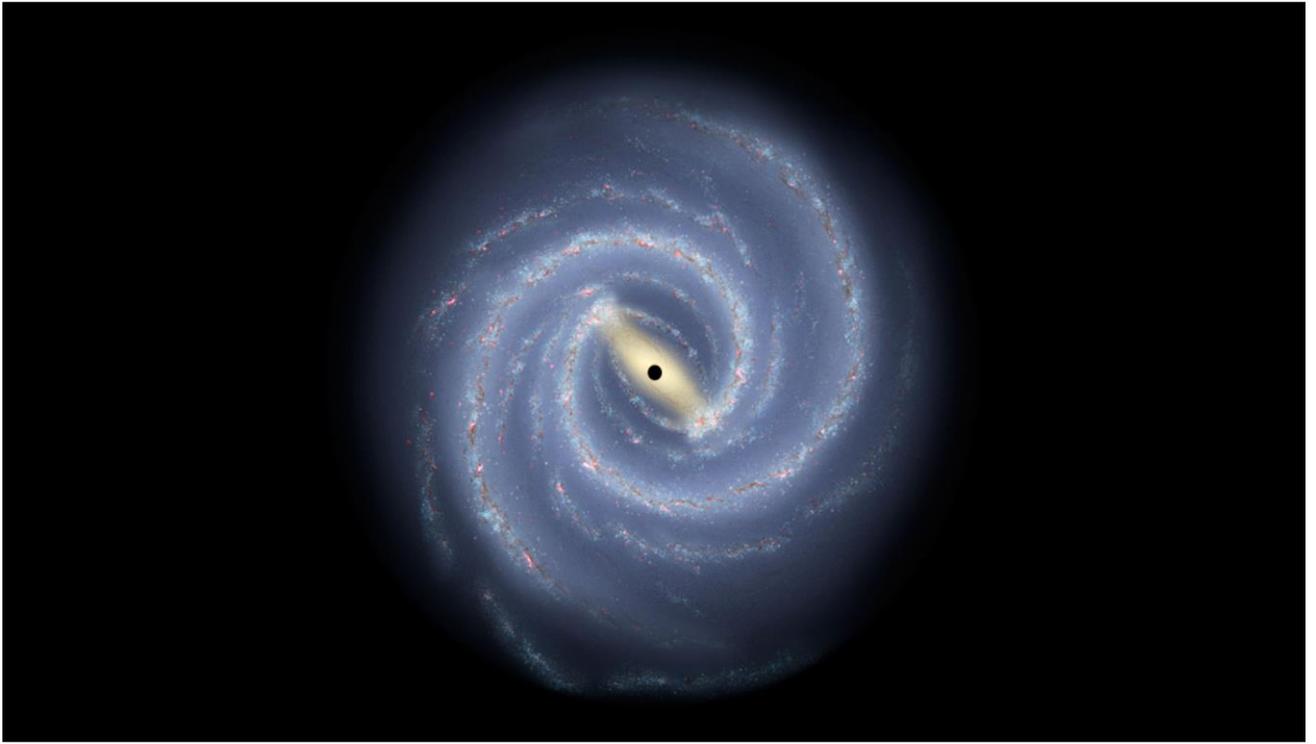
To estimate these distances – **26,000** light years from the Sun to the center, and **100,000** light years wide – astronomers have a “toolkit” of techniques.

Referring to this toolkit, in paper 41 section 3, the author states: [quote]

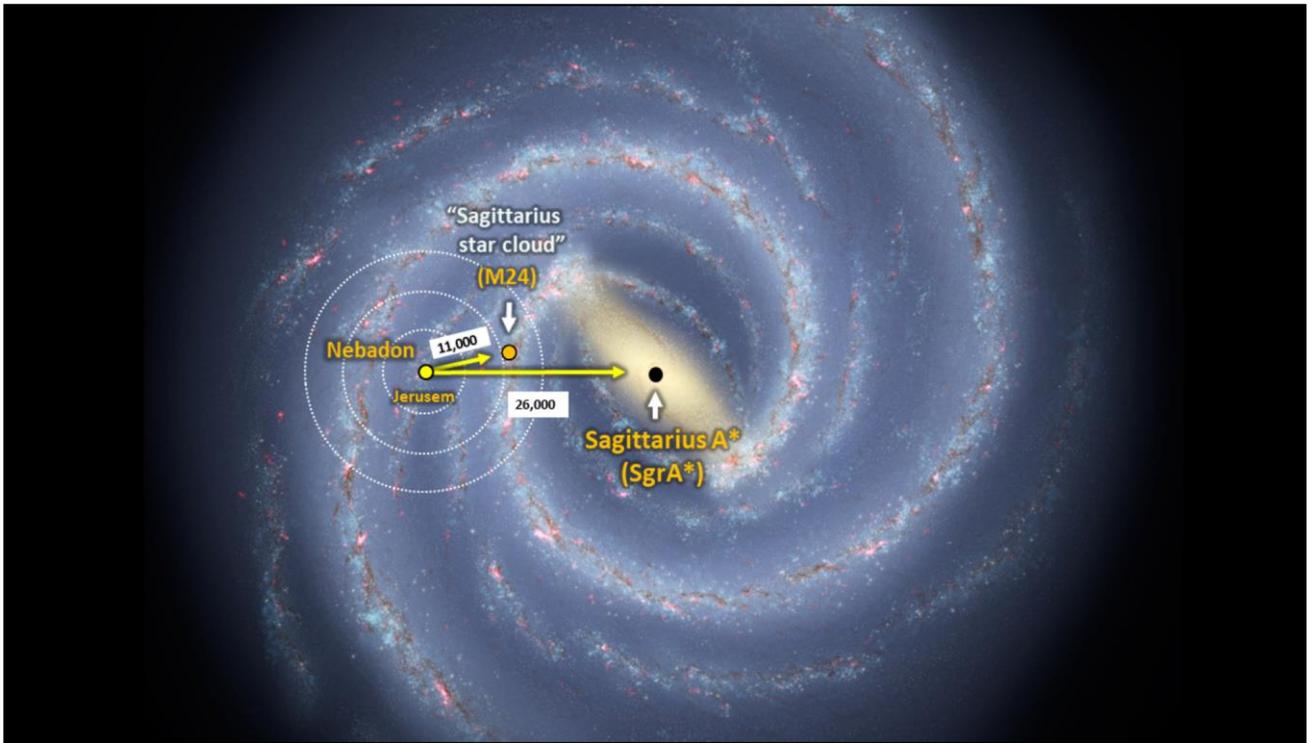
“By this technique [Ed. referring to “**Cepheid variables**”] it is possible to measure stellar distances **most precisely** up to more than one million light-years”. (459.4, 41:3.10) [end quote]

“**Most precisely**”. Which implies that current measurements of distance **within** this disk are on track. In particular, this distance of 26,000 light years to Sagittarius A-star.

Ok, so far, so good.



Now, does the Urantia Book say anything interesting about this system of stars?



Yes it does.

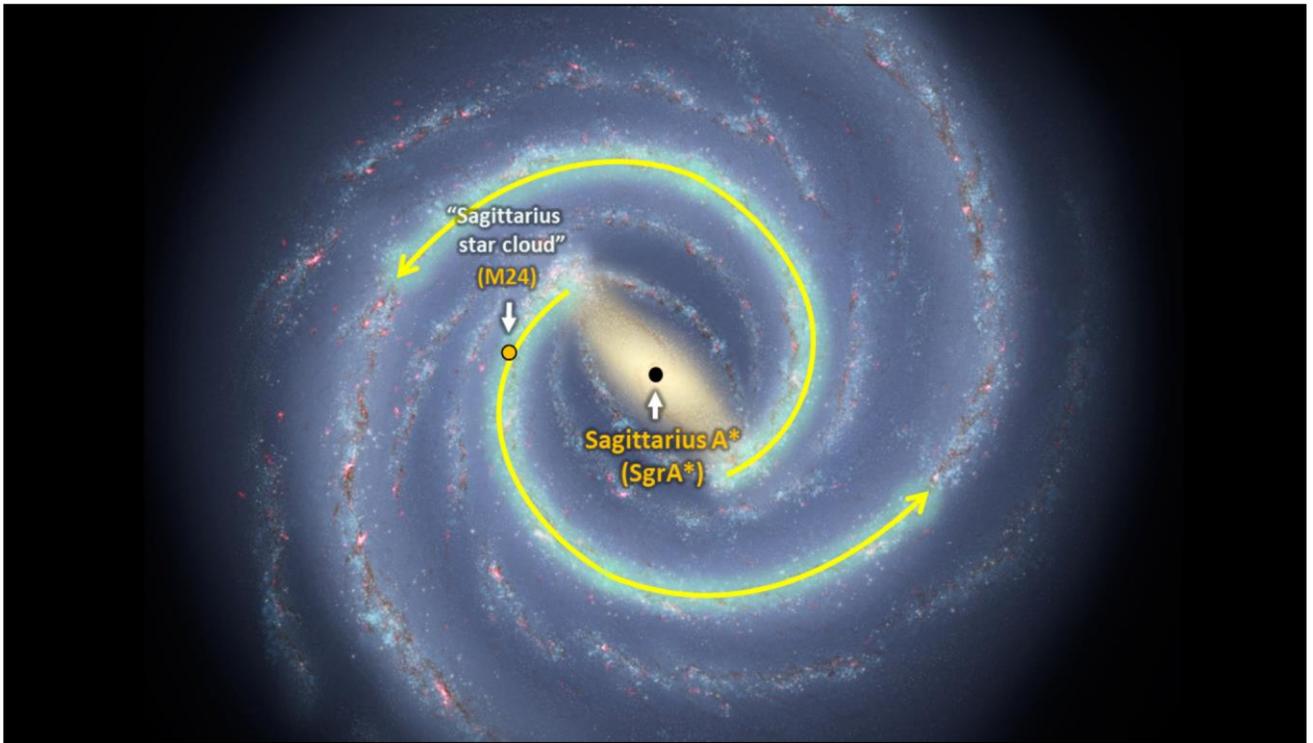
It says the center of our minor sector is over [here].

From paper 15:3 [quote]:

“The rotational center of your minor sector is situated far away in the enormous and dense star cloud of Sagittarius, around which your local universe and its associated creations all move, [...]” (15:3.5)

If by “**star cloud of Sagittarius**” they mean Messier 24 (about 11,000 light years away), and if this “**dense star cloud**” is the center of rotation for our minor sector, then...

Sagittarius A\* (about 26,000 LYs away) becomes an obvious candidate for the center of rotation of our major sector.



Again from paper 15:3 [quote]:

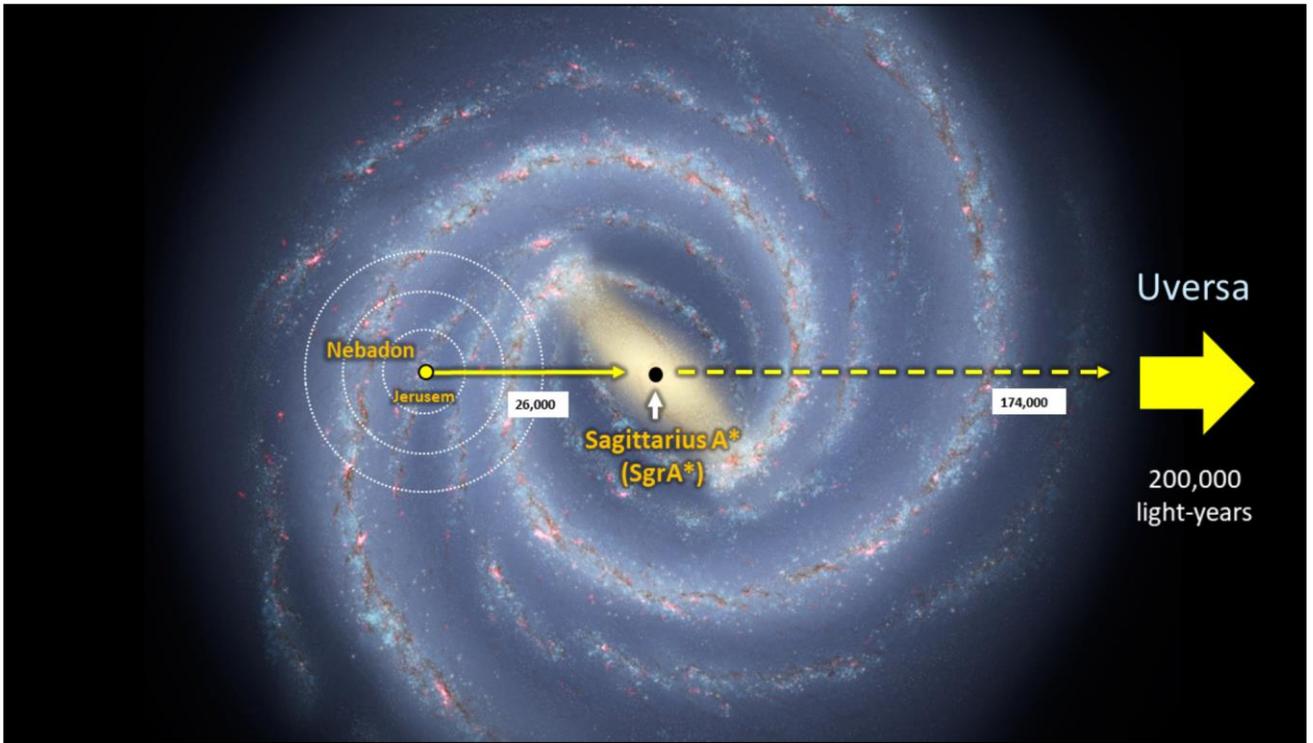
“[...], and from opposite sides of the vast Sagittarius subgalactic system you may observe **two great streams of star clouds** [repeat] emerging in stupendous stellar coils.” (168.1, 15:3.5) [end quote]

Notice, “two great streams of star clouds”.

The authors connect our minor sector (**Ensa**) with a single “star cloud” (Messier 24), then appear to suggest that our major sector (**Splandon**) is centered somewhere between those “streams of star clouds”, uncoiling from Sagittarius A-star.

All of which seems reasonable.

But then they say something weird. Or at least, unexpected.



From paper 32 section 2 [quote]:

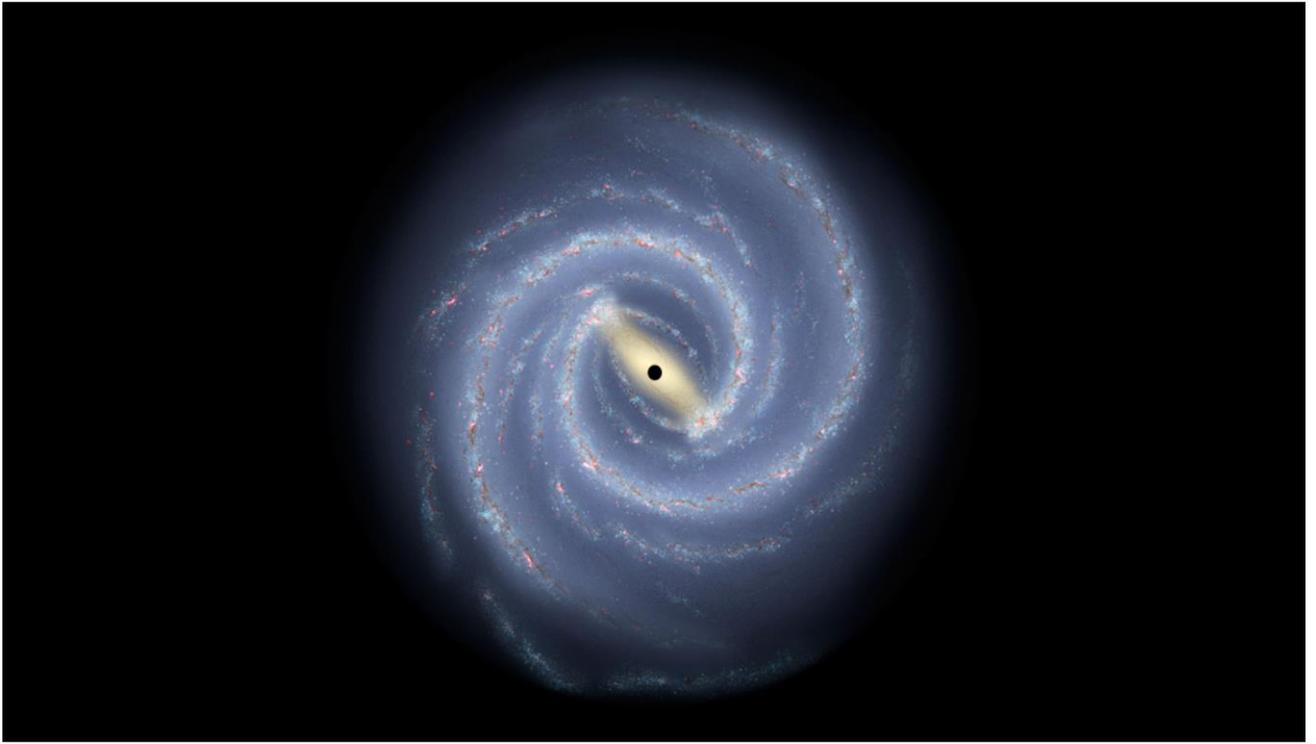
“[...]. From Jerusem, the headquarters of Satania, it is over two hundred thousand light-years to the physical center of the superuniverse of Orvonton, [...]” (32:2.11)

[end quote]

**Two hundred thousand light-years.**

That’s another... [ **174,000 light years!** ] past Sagittarius A-star.

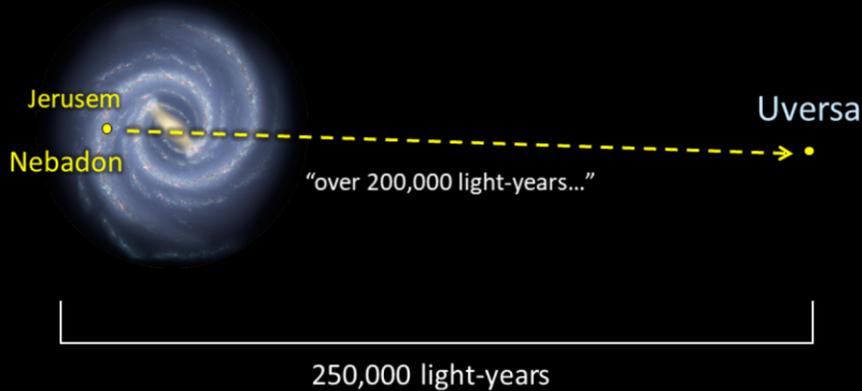
In other words, way, way off to the right in this diagram.



[Zoom out]

Let's try to put that distance in context...

“From the outermost system of inhabited worlds to the center of the superuniverse is a trifle less than two hundred and fifty thousand light-years.” [ Paper 32:2.11 ]



Once again, from paper 32 section 2, [quote]

“[...] From Jerusem, the headquarters of Satania, it is over two hundred thousand light-years to the physical center of the superuniverse of Orvonton, ...”.

And from the same paragraph:

“From the outermost system of inhabited worlds to the center of the superuniverse is a trifle less than two hundred and fifty thousand light-years.” (359.8, 32:2.11)

[end quote]

“Nebadon is now well out  
towards the edge of  
Orvonton.” [ Paper 32:2.11 ]



Uversa  
•

But hang on, in this story, Uversa is supposed to be a center of rotation ;  
a center of rotation for [ **eventually** ] the ten major sectors of a  
“superuniverse”.

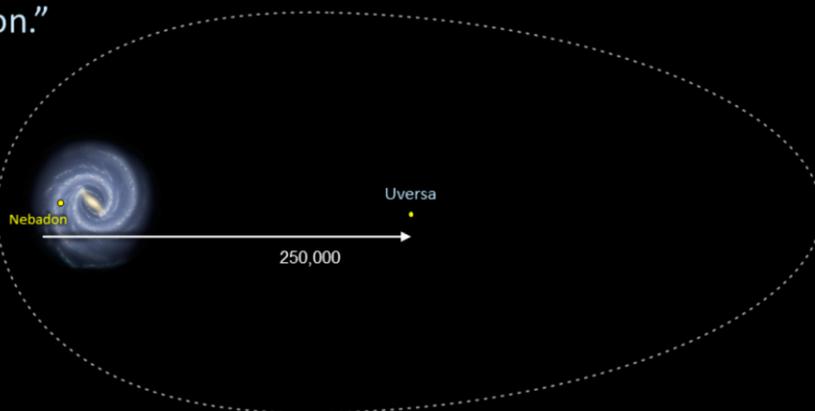
How can we make this work?

Well, in that same section, the author also states that [quote]

**“Nebadon is now well out towards the edge of Orvonton” (32:2.11)**

[end quote].

“Nebadon is now well out  
towards the edge of  
Orvonton.”



“..., and the length  
far greater than the breadth.”

[ Paper 15:3.2 ]

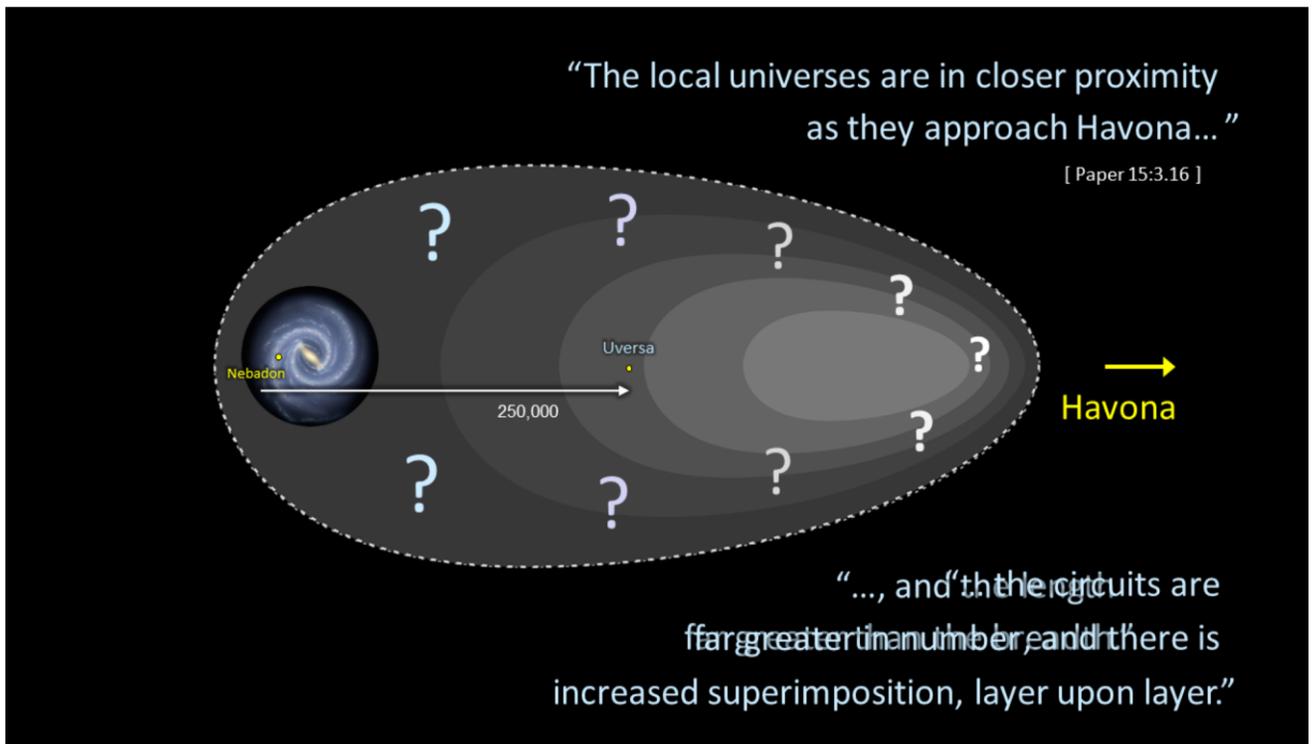
Here's that distance again: 250,000 light years, from  
the “edge of Orvonton” to Uversa.

But back in paper 15 section 3, they say that “**the length**”  
of this superuniverse is... [quote]:

“**far greater than the breadth**” (15:3.2)

Do they mean something like this?

They reveal a bit more; from 15:3.16 [quote]



...

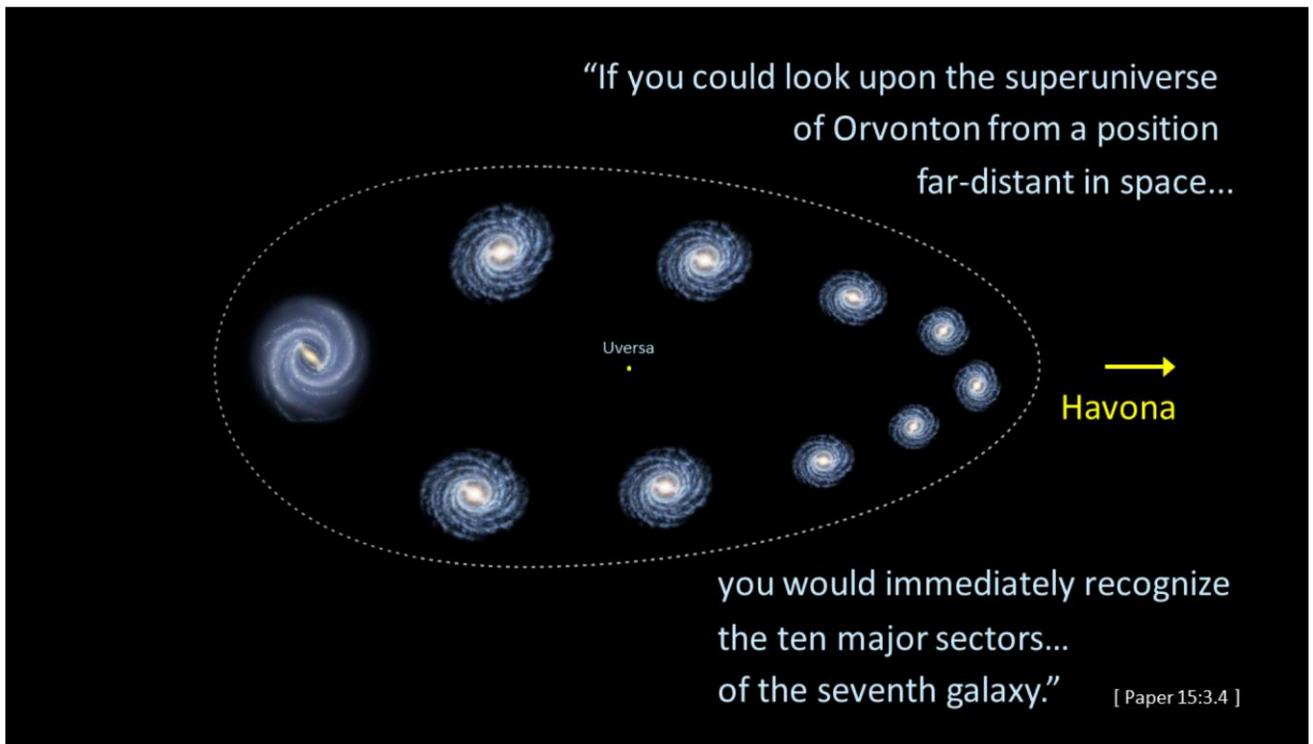
“The local universes are in closer proximity as they approach Havona; ...

They also state that, on the Havona side,  
local universes are more tightly clustered, and [quote]... **“layered”**.

Are they suggesting a distribution...

[ **wipe density gradient** ] something like this?

But what about those 10 major sectors...



Again, from 15:3, [quote]

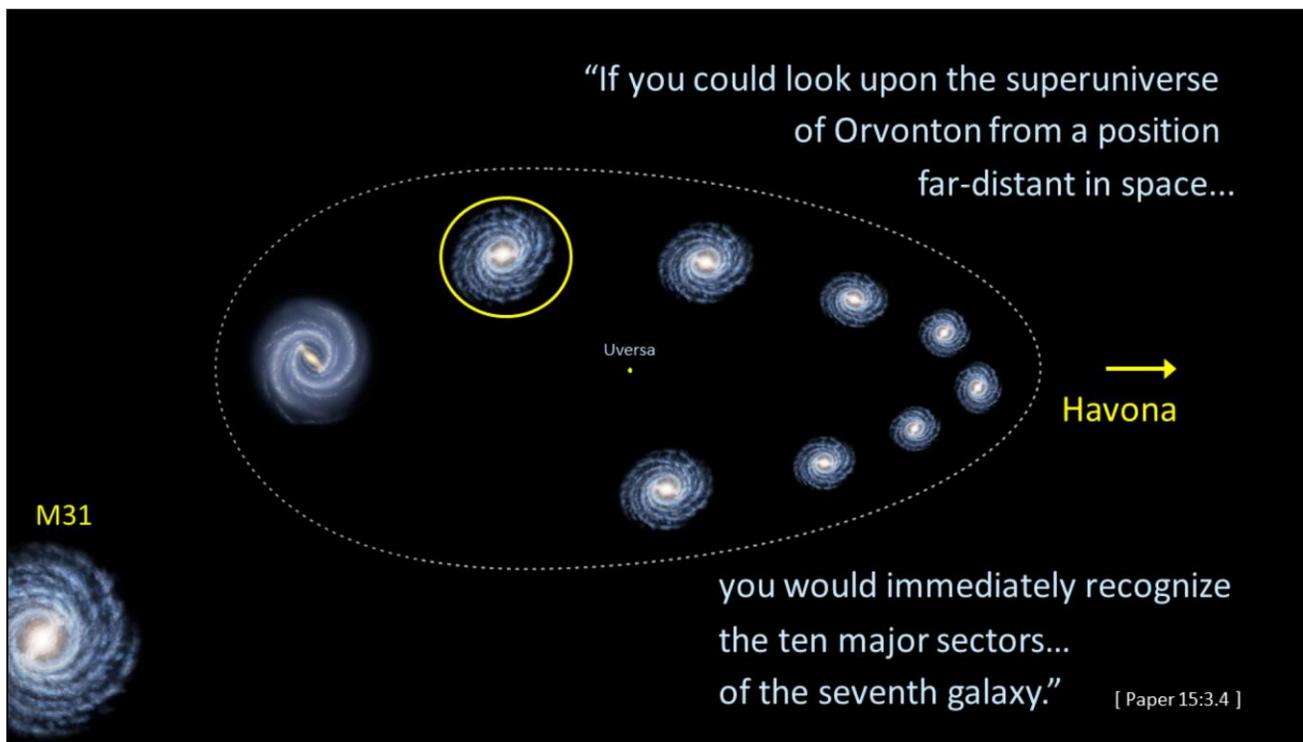
“[...]. If you could look upon the superuniverse of Orvonton from a position far-distant in space, you would **immediately** recognize the ten major sectors of the **seventh galaxy**” (15:3.4)

About this term, “**7<sup>th</sup> galaxy**”. Throughout these papers “**galaxy**” is used as a collective noun, as in “galaxy of stars”, or “galaxy of gods”.

So if we read “**galaxy**” as... “**galaxy of major sector spirals**”

( which we would “*immediately recognize*” )

are they suggesting... [ **wipe spirals** ] something like this?



But then again, in paper 12 section 1, the author implies that this “seventh galaxy” (of major sector spirals) is [quote]

“... as yet uncompleted.” (12:1.13)

Which makes you wonder: is the Andromeda spiral actually one of Orvonton’s future major sectors, slowly sliding into place?

Of course, nothing in native astronomy or cosmology predicts anything like this. But as a thought experiment, let’s ask the question:

“If this spiral of stars were here, could we see it?”



Remember, almost ALL the Milky Way's hundreds of billions of stars lie along its midplane, within this thin disk, about 1,000 light years thick.

So in Paper 32, when they mention that [quote]

**"dense diameter of the Milky Way",**

think of this thin red band.



Now, imagine we could bring that Andromeda spiral  
**10 times closer** than it is, and place it 200,000 light years  
**behind** the Milky Way.

To get a better view, let's ...



... switch to infrared. Ok, if such a **nearby, giant** spiral were spinning face on to our line of sight, it would be very easy to see!

But if we tilt this neighbor to be edge on, its profile – in ALL wavelengths – becomes... a **faint echo** of the foreground Milky Way.

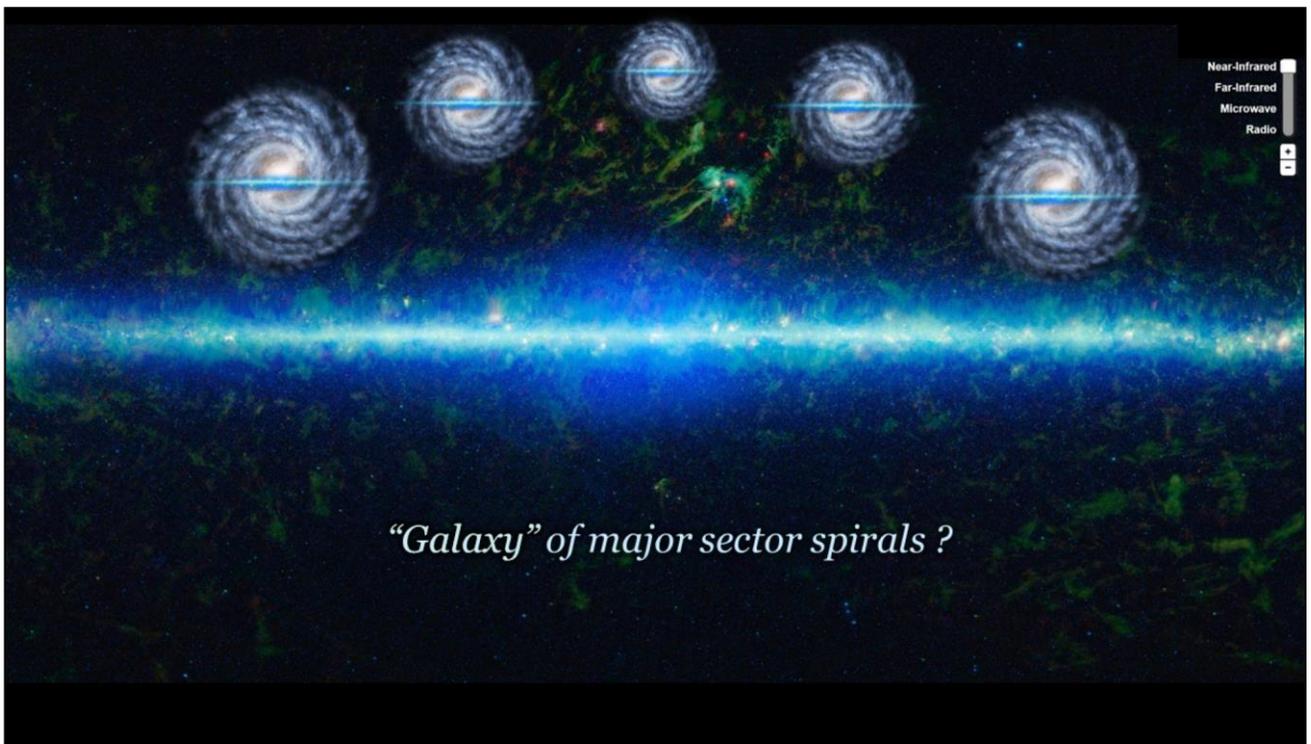
So, when we drop it down – into the plane of the Milky Way – its profile becomes, well, **vanishingly** faint.

A **vanishingly faint** echo, sitting right behind that [quote]

**“dense diameter of the Milky Way”.**

So here’s the question:

Using existing telescopes, if such a neighbor existed, could we see it?



Or what about this: a **set** of spiral galaxies;

What we have here is... a “Urantia Book” galaxy; in other words,  
a “galaxy of major sector spirals” (?!)

All tilted to be precisely edge-on;

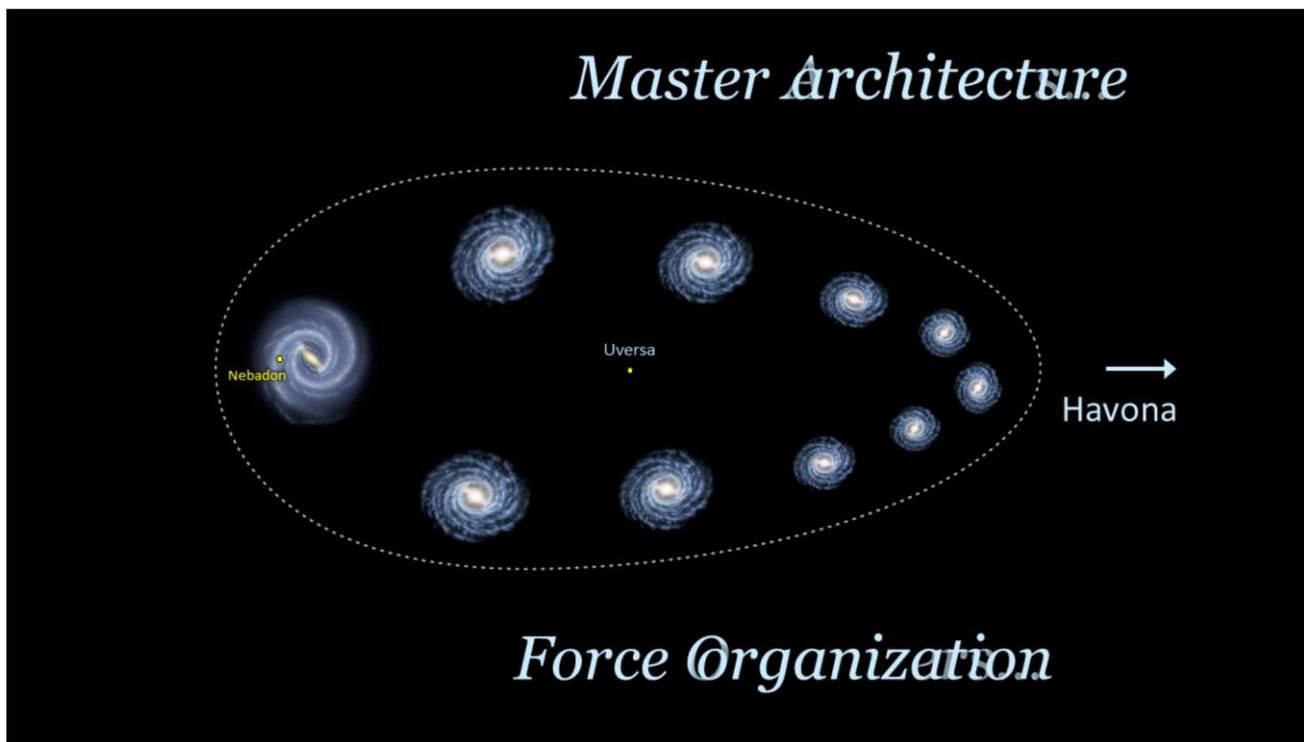
All lined up directly behind this “**dense diameter**”.

The James Webb Space Telescope will be launched soon...

**What if** something like this:

[ **REPLAY descent** ] a “galaxy of major sector spirals”,  
were the first thing that telescope finds?

Hold that thought!



Keep in mind, this is still just our “thought experiment”. There’s no scientific reason or data to suggest that a system like this exists. For me, this is just the simplest way to model what the papers seem to say.

With this in mind, let’s take the next step, and see where this thought experiment leads.

Clearly, a system like this implies "**architecture**". And "**organization**". Both of which the Urantia Book describes:

( with its Master Architects, and Force Organizers... )

And as we saw in previous chapters...

# *The Urantia Book*

*Introducing a bigger frame in which to think*

1: Universe frames

2: the Personal Universe

3: a Family Affair

4: **Cosmology**

4A – Foundations

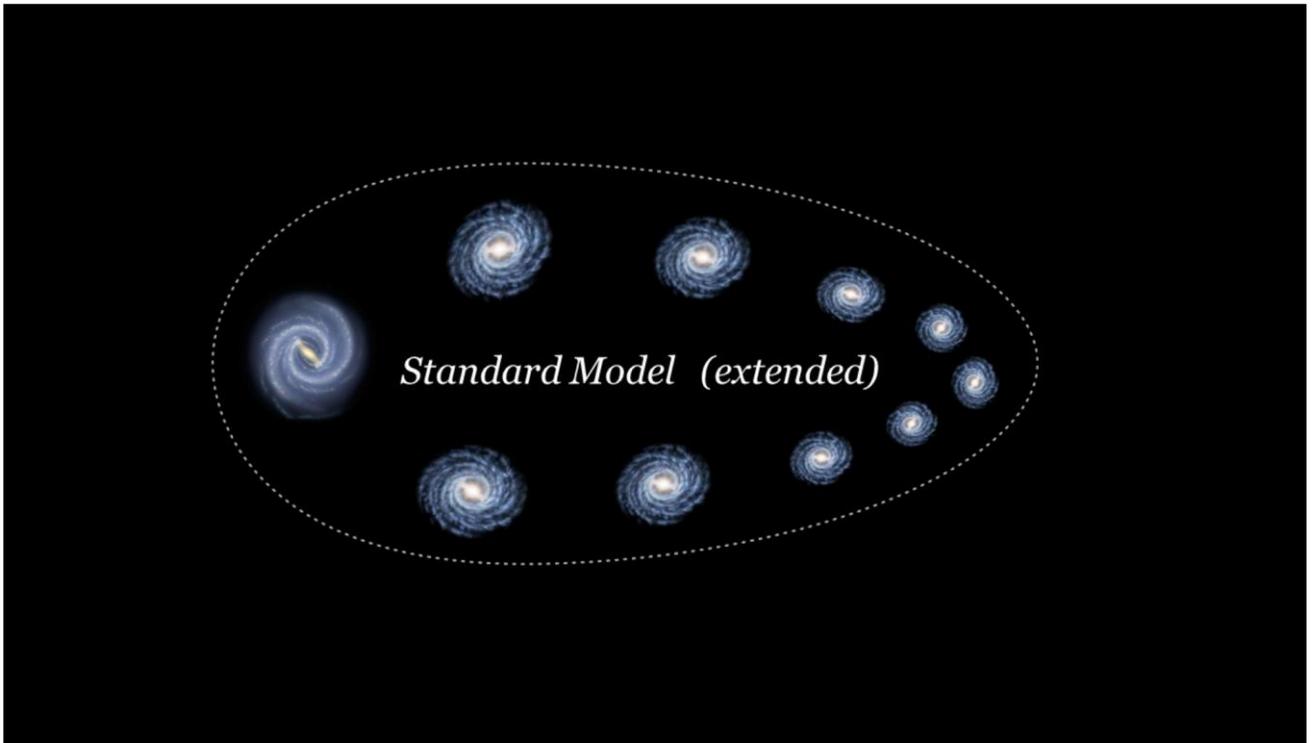
4B – Mass & Matter

4C – Exploding Dark Islands

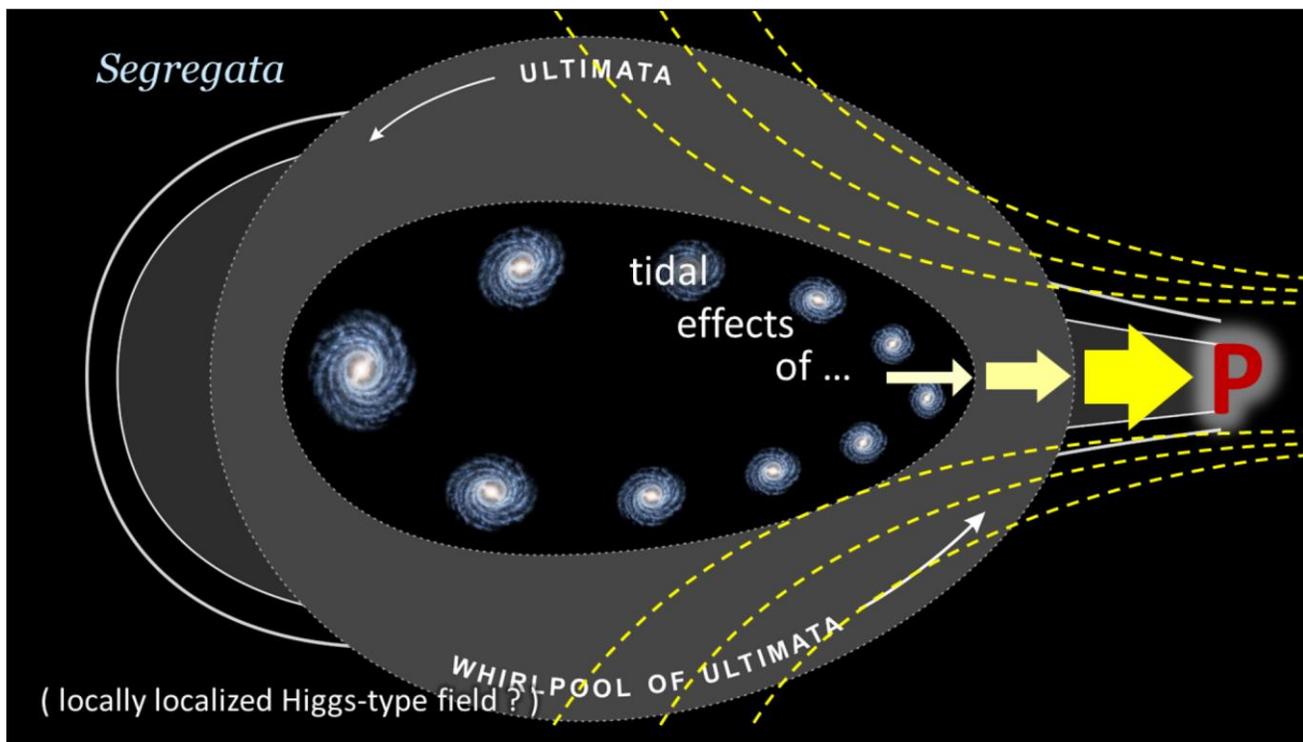
4D – **Ancient Orvonton** (and a young cosmic web)

... (see parts 4A, 4B and 4C),

these papers also provide the sort of **extended standard physics** that such a scheme requires,



adding to this picture three essential (but invisible, or **dark**) parts:



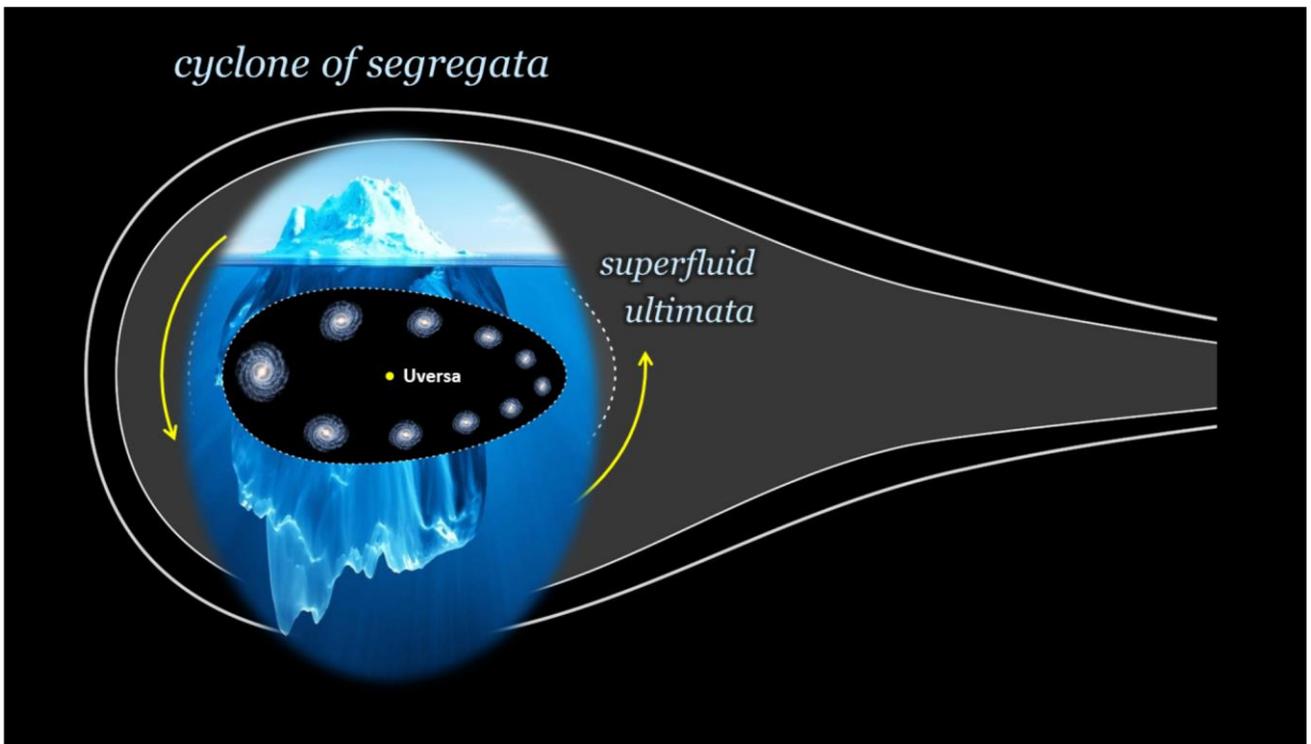
**One**: that vast swirling cyclone of massive **ultimata**,

**Two**: that ancestral halo of **segregata** (or “pure energy”),

**And 3**: (and most importantly) the tidal effects of **Paradise** – the universe’s **source and center of gravity** – acting for a **very** long time.

Question is: could this sort of **extended standard physics** explain the evolution of a system like this?

Let’s have a look.

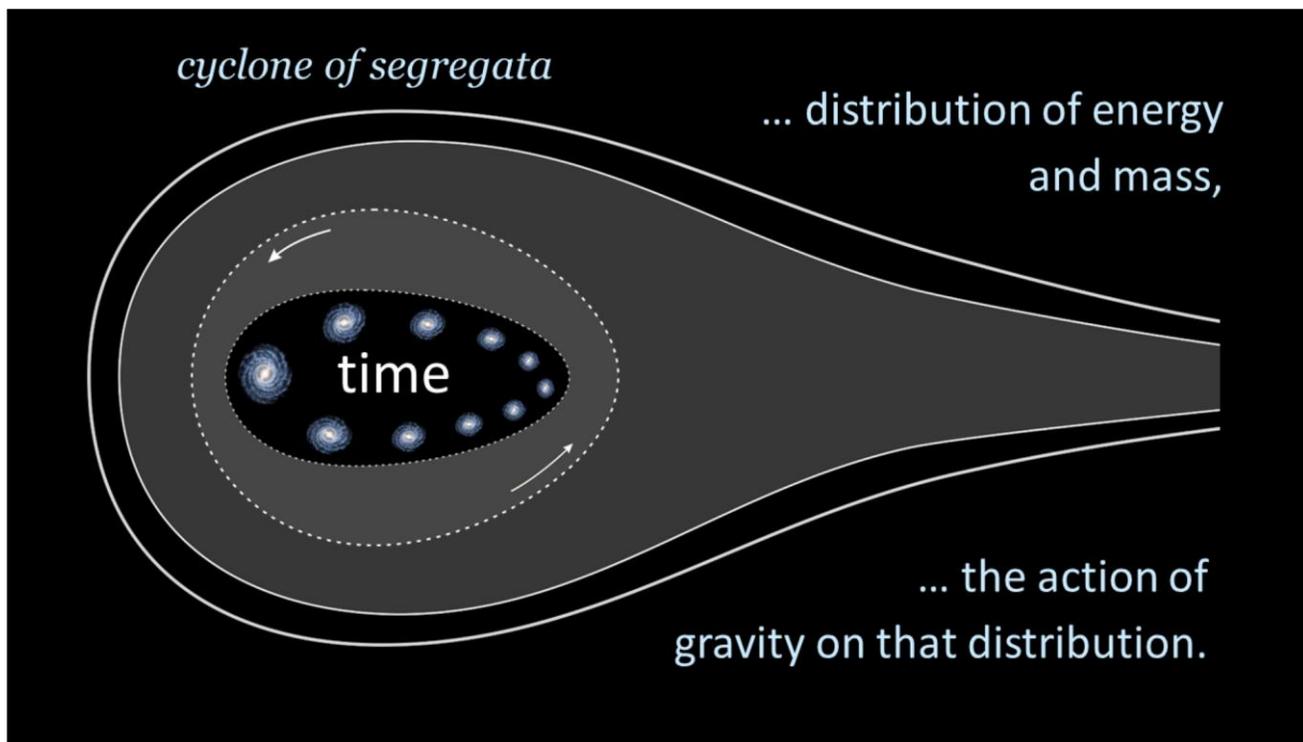


Think how ice is less dense than water; how icebergs – enormous “mountains of ice” – float, and get carried along by ocean currents.

Now think of these spirals of stars – these disks of gravita – as icebergs in a flow. A vast, *superfluid* flow, not of water, but of **emergent ultimata**.

So these visible galaxies – these “iceberg spirals” – will naturally “**go with the flow**”, carried around Uversa not just by gravity, by also by ancient, “**force-organized**” flows.

Now, if we float this whole system in a cyclone of segregata (“pure energy”), then what we have here is a completely unexpected ...



... distribution of energy and mass.

And thus gravitational action; and response.

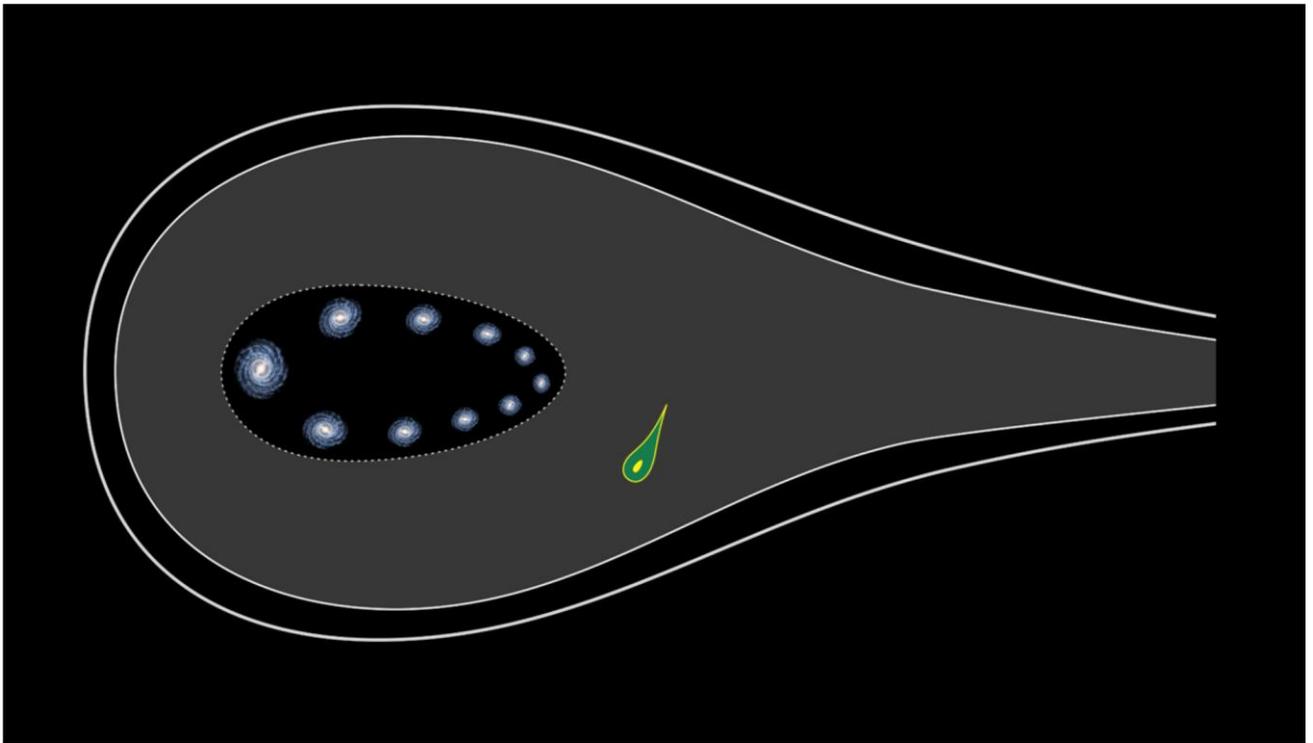
Within such enormous, energy-dense flows, these little spirals of stars would get carried along... like so much **fluff**.

The thing is, this sort of story fits right in with mainstream speculation: what we have here are spirals of stars, evolving in dark, superfluid disks, nested in halos of some mysterious, invisible condensate.

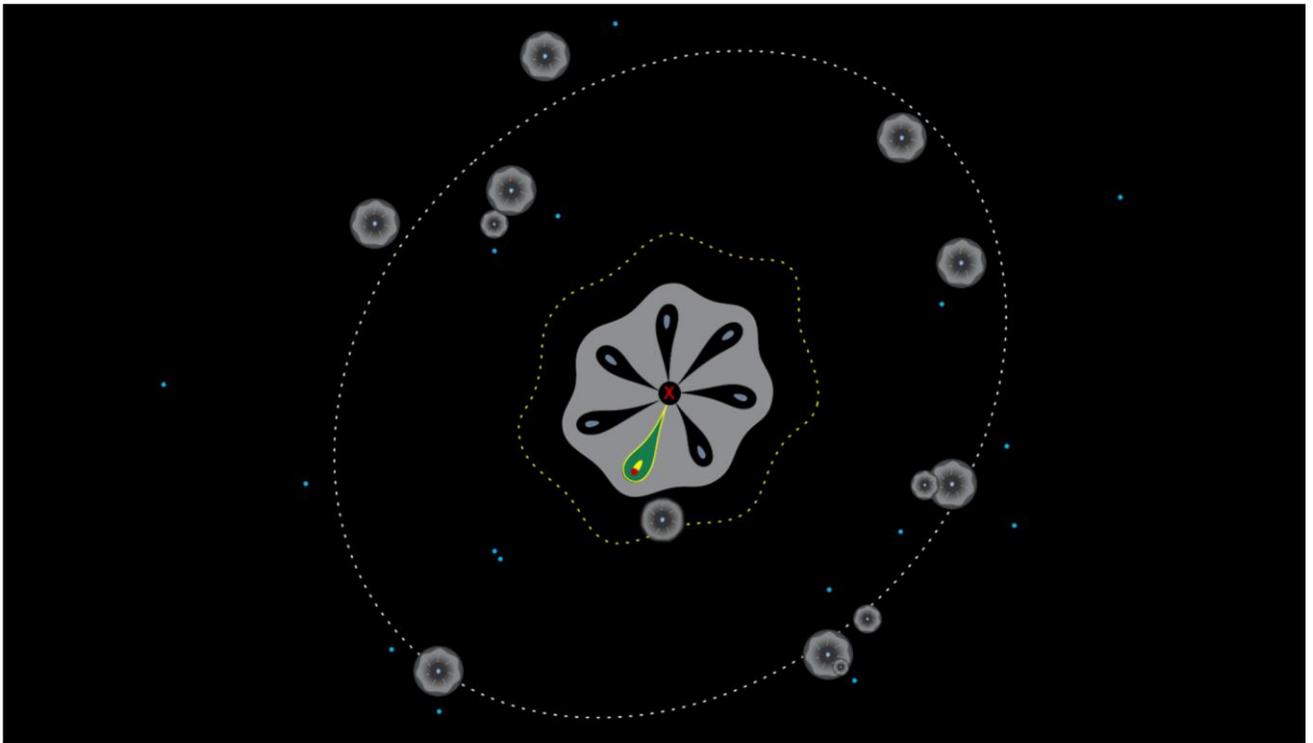
Which is **exactly** the sort of thing cosmologists (**right now!**) are discussing at their conferences.

So this sort of "gravitational action" on "invisible mass" is not so controversial. The real issues here are **organization**, and **time**.

Even with Paradise Architects, and Force Organizers pulling the strings, it would take a long, long time to evolve a structure like this.



And when we pop Orvonton into place, ...

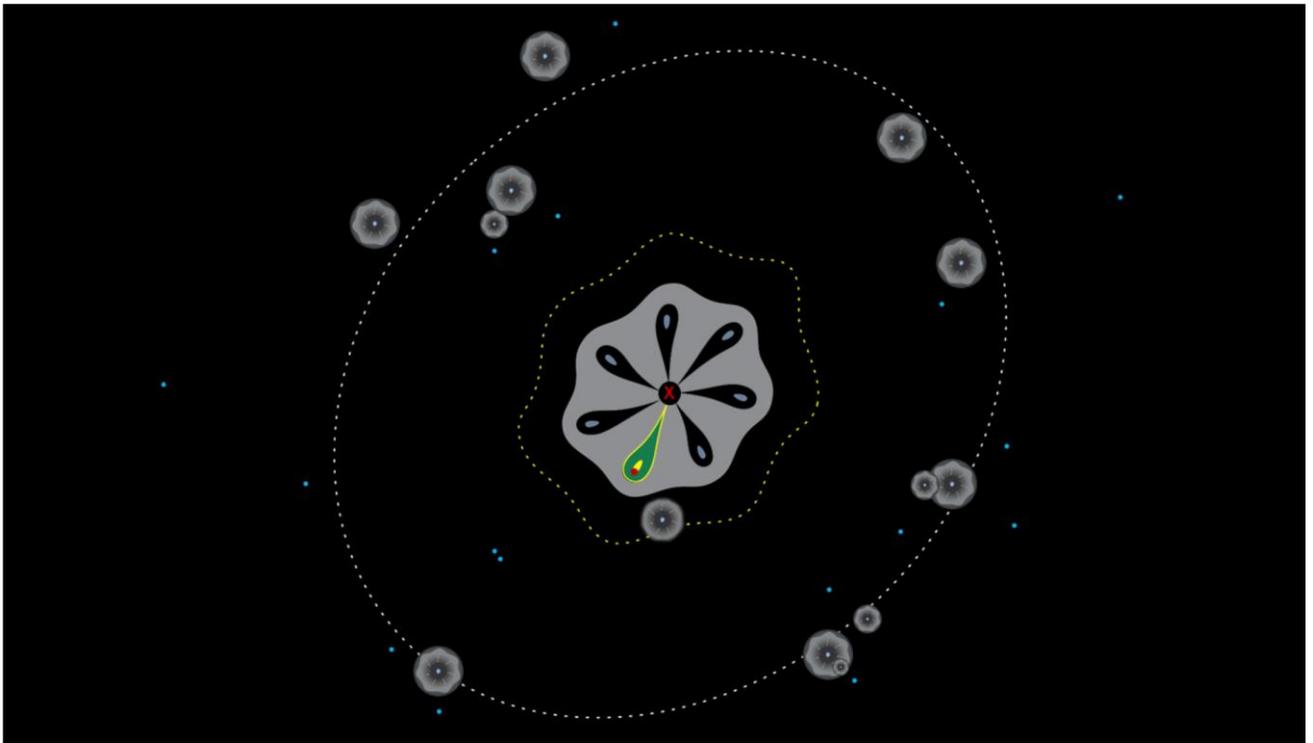


... as the 7th spoke in that “grand universe wheel”, this issue of time becomes deep: in telling the story of this relatively small “grand universe”, the papers talk in terms of [trillions](#) (with a “T”), not mere **billions** of years.

Which brings us back to that point I made at the start.

In Urantia Book cosmology, from a finite, or time-dependent point of view, this “grand universe age”, this vast span of time – and evolutionary effort – applies only along the [superuniverse rim](#) of this grand universe wheel.

The doings of outer space – relatively speaking – may have only just begun.



**Once again:** let me emphasize, this is not the scientific method at work.

This is simply a sketch of the sort of story the Urantia book reveals; an attempt to see how our local spiral of stars, the Milky Way, might fit in with the idea of “Orvonton”, and how a truly ancient “grand universe” might fit into some kind of reasonable astronomical context.

So now the fun begins: How do we connect up this handful of unorthodox and ambiguous ideas... to what native science currently believes?

Let’s have a look at what’s involved.