

# Chapter 8

## The Central Universe

All who attain the central universe can and do immediately commune with one of the Seven Master Spirits, the one presiding over the superuniverse from which the newly arrived space pilgrim hails. <sup>16:2.1</sup>

The Isle of Paradise is surrounded by the billion perfect worlds of Havona, which revolve in seven circuits about it in the plane of creation. Between the first or inner circuit of Havona and Paradise are the three circuits of the sacred spheres of the Father, Son, and Spirit. Surrounding the seven circuits of Havona are two circuits of enormous dark gravity bodies. The worlds of Havona are at least as large as our sun, which has 10,000 times the surface area of the earth. However, the gravity on the surface of these perfect spheres is somewhat comparable to earth's, since they all have breathable atmospheres and there are lakes and rivers of water on them.

When we finally ascend from Uversa to the seventh circuit of the Havona worlds, we are spirits of the third order. Upon reaching the pilot world of the seventh circuit, we will immediately recognize the Seventh Master Spirit, who presides over Orvonton. During our time on the worlds of the seventh circuit, we achieve "identity comprehension" of this Master Spirit. <sup>14:5.4</sup> After we come to really know the Master Spirits, we advance to the pilot world of the sixth circuit. "Mortals become quartan or graduate spirits after reaching the sixth circle of Havona." <sup>31:3.4</sup> After attaining a "realization of Supremacy" on these worlds, we are taken to the fifth circuit, where we achieve recognition of the Infinite Spirit. On the fourth circuit we attain realization of the Eternal Son. When we arrive on the third circuit, we begin to really know the Universal Father. We become "spirits of the fifth order when [we] find the Universal Father." <sup>31:3.4</sup> We become more familiar with the Paradise Trinity on the second circuit. Attaining the first circuit "signifies the acceptance of the candidates of time into the service of Paradise." <sup>14:5.4</sup>

The revolution of the central universe occurs under the short-range force of linear gravity, since the period of revolution for the Havona worlds about Paradise increases from the innermost to the outermost circuit. The period of

revolution for worlds in the first Havona circuit is 1,000 years. A heuristic application of general relativity finds a maximum possible orbital velocity of  $0.577c$  for the circuit of the Father's sacred spheres. Making some assumptions about the spacing of the orbits and using the period of 1,000 years, the radius of the first Havona circuit is found to be 32.5 light-years. These worlds have an orbital velocity about Paradise of  $0.204c$  or 61,000 km/s (kilometers per second). The radius of the Isle of Paradise is 2.7 light-years and its mass equals 8.67 trillion suns. Under certain additional assumptions, the dark gravity bodies orbit at about 325 light-years. The mass of the central universe is far greater than the mass of the seven superuniverses, which potentially totals 70 trillion suns, and most of this central universe mass is found in the dark gravity bodies.

These quantities cannot be taken too seriously, given the numerous assumptions made. But they do provide some sense of scale for the dimensions and dynamics of the central universe. Given the period of revolution of 1,000 years and the knowledge from general relativity that the nearest stable orbit cannot have a velocity greater than  $0.577c$ , the first circuit of Havona worlds cannot be more than 91 light-years distant from Paradise. The central universe very probably does not exceed 1,000 light-years in radius. This is relatively small on a cosmic scale. The distance to the center of our own Milky Way galaxy is about 26,000 light-years away in the constellation of Sagittarius.

## 1. Worlds of Havona

The Isle of Paradise is at the center of Havona, the central universe. "The billion worlds of Havona are arranged in seven concentric circuits immediately surrounding the three circuits of Paradise satellites. There are upwards of thirty-five million worlds in the innermost Havona circuit and over two hundred and forty-five million in the outermost, with proportionate numbers intervening."<sup>14:1.9</sup> This reference to proportionate numbers of worlds implies that there is twice the number of worlds in the second circuit, three times as many in third, and so forth. Using this implied relationship, the number of worlds in the first circuit equals:

$$n = \frac{1,000,000,000}{(1 + 2 + 3 + 4 + 5 + 6 + 7)} = 35,714,285.71$$

Rounding to the nearest whole number, this would make the number of worlds in each circuit:

Table 3: **Worlds in the Havona Circuits**

Circuit	No. of Worlds
1	35,714,286
2	71,428,571
3	107,142,857
4	142,857,143
5	178,571,429
6	214,285,714
7	250,000,000
Total	1,000,000,000

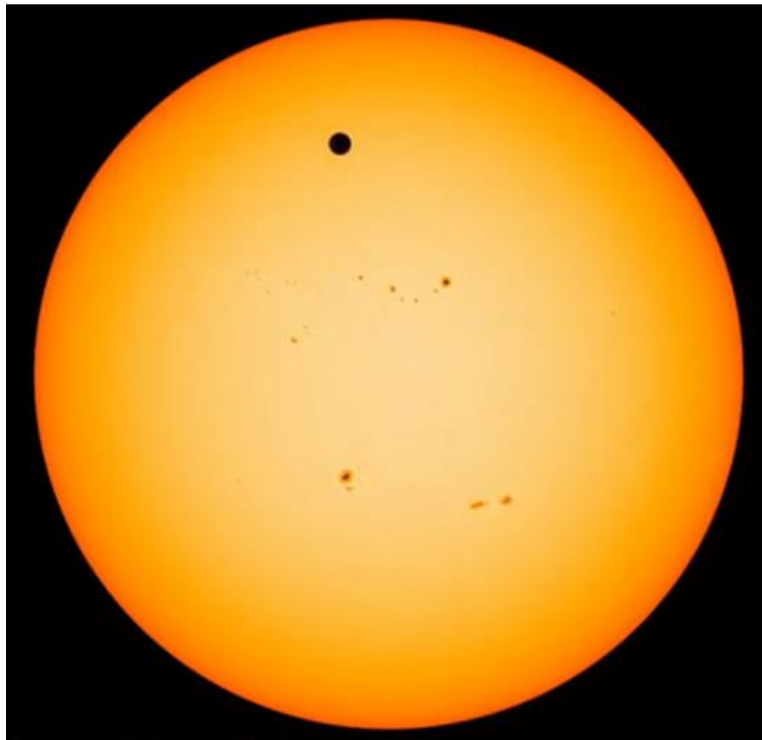
These worlds all appear to be the same size, which is larger than that of all other inhabited spheres. They are “actual spheres of a material nature ... Nowhere else in all the grand universe is it convenient to utilize such enormous spheres as inhabited worlds.” <sup>14:3.6</sup> The mass of these worlds is large enough that antigravity is used to maintain a level of gravitational force on their surfaces which is compatible with habitation. “Antigravity is also employed in the organization of the material functions and the spiritual activities of these enormous worlds.” <sup>14:3.6</sup>

The material gravity present on the surface of an inhabitable sphere must lie within certain limits. If there is too little gravity, the planet cannot retain an atmosphere. Too much gravity creates an un-breathable atmosphere. In describing some of the planets in Satania, a Melchizedek makes mention of gravitational limits to habitation: “Not all planets are suited to harbor mortal life. Small ones having a high rate of axial revolution are wholly unsuited for life habitats. In several of the physical systems of Satania the planets revolving around the central sun are too large for habitation, their great mass occasioning oppressive gravity.” <sup>49:0.4</sup>

With regard to inhabitable levels of gravity, a Melchizedek informs us that “Jerusem, the system capital, is almost one hundred times the size of Urantia, although its gravity is a trifle less.” <sup>45:0.1</sup> Jerusem is an artificially constructed architectural world, instead of a planet which evolves through the gradual gravitational accretion of matter. The size of Jerusem approaches that of our sun, which is 109 times larger than the earth. Where gravity on the surface of the sun is 28 times stronger than it is on earth, gravity on Jerusem is a “trifle less” than

the gravity here. Although the volume of Jerusem is one million times that of earth, the mass of Jerusem is only about three percent of the mass of our sun, based upon a surface gravity equal to ours. The inhabitable surface area of Jerusem is 10,000 times greater than earth's surface area. A sense of the scale of the architectural sphere of Jerusem compared to the earth can be gained from a recent NASA photograph of Venus passing in front of our sun, since Venus is roughly the size of earth.

Fig. 16: Transit of the Sun by Venus – June 5, 2012



NASA's Solar Dynamics Observatory

With a surface gravity about equal to ours, Jerusem has an atmosphere “very similar to that of Urantia with the addition of a gas adapted to the respiration of the morontia order of life.” <sup>46:2.3</sup> Planets where the surface gravity is less than half that of Urantia tend to have thin or no atmospheric gases, such as Mars, Mercury, and the moon. Planets with a surface gravity greater than twice that of Urantia, like Jupiter, Saturn, Uranus, and Neptune, have dense atmospheres. Inhabitable planets appear to have a surface gravity somewhere between 50 and 150 percent that of Urantia. Assuming a mass density comparable to our planet, this restricts the size of inhabitable planets to between 80 and 140 percent of the

size of Urantia. Neptune, the smallest of the outer gas planets, is almost four times the size of earth.

The material worlds of Havona are many times larger than Urantia, but they have well-formed inhabitable surfaces, unlike evolutionary planets which are just a few times larger than Urantia. This is partly due to the nature of energy-matter which constitutes these worlds. Their "literal substance differs from the material organization of the planets of the seven superuniverses." 14:2.1 "Havona energies are threefold; superuniverse units of energy-matter contain a twofold energy charge." 14:2.2 Still, the effective surface gravity on these worlds should be somewhere in the general neighborhood of Urantia's, in order to sustain an atmosphere which is neither too thin nor too dense. The fact that "there are real rivers and lakes on these perfect worlds" 14:3.7 requires that they have a surface gravity and atmospheric pressure which is not too radically different from ours.

There are numerous parallels between the worlds of Havona and the architectural spheres constructed in the seven superuniverses. An Archangel of Nebadon tells us that "Jerusem is indeed a foretaste of paradisiacal glory and grandeur." 46:2.6 Jerusem "foreshadows the beauty, the harmony, and the perfection of the eternal worlds of the central and divine universe." 46:2.5 "In reality, all headquarters worlds are paradisiacal." 15:7.3 Jerusem, along with all of the other architectural spheres of Nebadon, was constructed within a few billion years of the arrival of Michael. There are lakes and rivers on all of these architectural worlds, just as there are on the Havona worlds. "The water of Edentia and similar architectural spheres is no different from the water of the evolutionary planets." 43:1.2 Edentia, the capital of our constellation, is "approximately one hundred times as large" as Urantia, just like Jerusem. 43:0.2 All of this suggests that the Havona worlds are somewhat similar in size to the architectural headquarters spheres of the superuniverses, or perhaps somewhat larger, and possess a surface gravity somewhat comparable to Urantia's.

## 2. The Sacred Spheres of Paradise

The Isle of Paradise is "the most gigantic organized body of cosmic reality in all the master universe. Paradise is a material sphere as well as a spiritual abode." 11:0.1 The material worlds of Havona are kept in their circuits by the

short-range linear gravity of Paradise, not by long-range absolute gravity. "Local or linear gravity pertains to ... the central, super-, and outer universes, wherever suitable materialization has taken place." 11:8.3 The grasp of these worlds by linear gravity instead of absolute gravity can be deduced from the statement that the period of revolution about Paradise decreases as the radius of the orbit decreases. "All worlds in a given circuit have the same length of year since they uniformly swing around Paradise, and the length of these planetary years decreases from the outermost to the innermost circuit." 14:1.11 If absolute gravity held the Havona worlds in stable orbits, every circuit would have the same period of revolution about Paradise. Immediately surrounding the Isle of Paradise are the three orbits of the sacred spheres of the Father, Son, and Spirit.

The Perfector of Wisdom kindly provides us with the period of revolution for the first or inner circuit of Havona worlds. This makes it possible to obtain a general idea of the size of Havona and the mass and size of the Isle of Paradise. One Paradise-Havona day is the period of revolution for the first circuit of Havona worlds. This is the standard measure of time in the central universe. A world in the first circuit completes one revolution about Paradise in "just seven minutes, three and one-eighth seconds less than one thousand years of the present Urantia leap-year calendar." 14:1.12 If this inner circuit had an orbital velocity equal to the velocity of light, the maximum circumferential distance traversed by a Havona world in the first circuit would be a trifle less than 1,000 light-years. At the velocity of light this makes the maximum possible radial distance from Paradise 159 light-years ( $r \cong 1,000 \text{ ly}/2\pi$ ). However, the radial distance to the first circuit must be significantly less than this, because of the three circuits of sacred spheres intervening between the first Havona circuit and Paradise.

"Between the central Isle of Paradise and the innermost of the Havona planetary circuits there are situated in space three lesser circuits of special spheres." 13:0.1 The three circuits of sacred spheres of Paradise lie in the space between the first Havona circuit and the Eternal Isle. Since they exist in the space of the central universe, their velocity cannot exceed the velocity of light. The orbital velocity of the first Havona circuit must be significantly less than the velocity of light, since linear gravity causes orbital velocity to increase as the radial distance decreases. The worlds of the Father are in the orbit closest to Paradise, and their orbital velocity is the greatest under the inverse-square relation.

Under general relativity, if a body is massive enough, its linear gravity will be strong enough to pull light inward towards the center of the body. This causes a

so-called black hole from which light cannot escape. There is an event horizon which light can cross going inward but cannot cross going out. This event horizon occurs at the Schwarzschild radius  $r_s$ . For a spherically symmetric non-rotating body, the radius of the event horizon defining a black hole equals  $r_s = 2GM/c^2$ . This radius is the minimum distance for any type of motion around a black hole.

The nearest possible stable orbit is at 1.5 times the Schwarzschild radius or  $r = 3GM/c^2$ . The region inside this radius and outside the event horizon is the photon sphere around a black hole. Photons of light can travel near the event horizon without crossing it, follow a curved path, and then escape. But photons cannot be in a stable orbit inside the photon sphere. The radius to the outer surface of the photon sphere is the minimum possible radius for a stable orbit about a black hole.

This equation for the Schwarzschild radius is not strictly applicable to the Isle of Paradise. Although this formula applies to non-rotating objects, which Paradise is, it is for objects that are spherically symmetric. Paradise is a disk with an elliptical boundary, instead of a sphere. However, this equation will be used heuristically as a means of obtaining a gross estimate of the radial distance to the worlds of the Father.

If it is assumed that the spheres of the Father are in the nearest possible stable orbit about the black hole generated by the mass of Paradise, their orbital radius is at the border of the photon sphere:  $r = 3GM/c^2$ . The velocity of a satellite in a stable orbit under linear gravity equals  $v = \sqrt{GM/r}$ . This equation can be rearranged as  $r = GM/v^2$ . From these two equations the velocity for a satellite in the lowest possible stable orbit about a black hole can be determined.

$$r = \frac{3GM}{c^2} \text{ and } r = \frac{GM}{v^2} \rightarrow v = \sqrt{\frac{c^2}{3}} = 0.577c$$

This orbital velocity of  $0.577c$  is only attainable in the superuniverses by subatomic particles. The physical nature of the seven worlds of the Father, Son, and Spirit is unlike other material realities in the superuniverses of Havona. The physical reality of the time-space universes consists of the electronic energy organization called *gravita*. The physical reality of the worlds of Havona is constituted of a different energy called *triata*. The physical reality of the worlds of the circuits of the Father, Son, and Spirit are neither: "Their material or physical construction is of an order unrevealed to you. Each circuit is diverse in material..." 13:0.2

The furthestmost extent of pervaded space is limited by the orbital velocity of light. This suggests that the innermost extent of pervaded space is also limited by the orbital velocity of light. But pervaded space does not touch the Isle of Paradise. Only relatively quiescent midspace touches Paradise. From what we are told, it does not appear possible that orbital revolution in midspace is possible. It would seem that midspace fills the region between the orbit of the Father's worlds at the outer border of the photosphere and the landing fields located on the peripheral surface of the Isle of Paradise at the inner border of the photosphere.

Between the Eternal Isle and the first Havona circuit are the other two circuits of Paradise satellites, containing seven worlds each, which belong to the Eternal Son and the Infinite Spirit. The spacing of these three inner circuits is not described, although we are told that the seven secret spheres of the Universal Father traverse the nearest orbit and revolve "in close proximity to the eternal Isle." 13:0.3 The maximum possible velocity of the Father's worlds is  $0.577c$ . One assumption is that orbits of these three circuits are equally spaced at one, two, and three quarters of the distance between Paradise and the first circuit. However, the first Havona circuit appears to be a reference point in the central universe, a location of symmetry separating two different creative designs.

In describing the responsibilities of the Master Architects, there is a significant distinction between the circuits of the Sacred Spheres of Paradise and the circuits of Havona worlds. The senior Master Architect is responsible for the three inner circuits and the next three Master Architects are responsible for the seven Havona circuits. These personalities are on different absonite levels of the Ultimate, which implies some fundamental difference between their plans for the Paradise satellites and the Havona worlds. The Paradise-Havona standard day is based upon the period of revolution for the first circuit, when it might seem more logical to base this standard upon the time required for the Father's worlds to complete one revolution. For these and other aesthetic reasons involving symmetry, another assumption will be adopted concerning orbital radii. The orbital radius of the worlds of the Infinite Spirit is taken as half the distance between the first circuit and Paradise. The orbital radius of the Son's worlds is half the distance of the Spirit's worlds to Paradise. The Father's worlds orbit at one half the distance between the Son's worlds and Paradise.

If the worlds of the Father have an orbital velocity of  $0.577c$ , then this velocity equals  $\sqrt{GM/r_F}$ , where  $r_F$  is the radial distance from Paradise to the circuit of the Father's sacred spheres. If the Father's worlds orbit at one-eighth of the distance between the first Havona circuit and Paradise ( $8r_F = r_{1st}$ ), then the orbital



velocity of the first circuit equals  $v_{1st} = \sqrt{GM/8r_F}$ . There are common elements in these two equations ( $G$ ,  $M$ , and  $r_F$ ), and this allows  $v_{1st}$  to be found in terms of the velocity of light.

$$0.577c = \sqrt{\frac{GM}{r_F}} \text{ and } v_{1st} = \sqrt{\frac{GM}{8r_F}}$$

$$v_{1st}^2 = \frac{(0.577c)^2}{8} \rightarrow v_{1st} = 0.204c$$

The Father's worlds have an orbital velocity of  $0.577c$ . Under the above assumptions, the first circuit has an orbital velocity of  $0.204c$ . The angular velocity of the first circuit equals  $2\pi$  divided by the period for one revolution. The orbital and angular velocities give a first circuit radius of 32.5 light-years.

$$\omega = \frac{2\pi}{T} = \frac{2\pi}{1,000 \text{ yr}} = 1.99 \times 10^{-10} \frac{\theta}{s}$$

$$r_{1st} = \frac{v}{\omega} = \frac{0.204c}{1.99 \times 10^{-10} \theta/s} = 32.5 \text{ ly}$$

Using a velocity of  $0.204c$  and a radius of 32.5 ly, the mass generating the linear gravity holding the first circuit of Havona worlds in orbit can be estimated.

$$v^2 = \frac{GM}{r} \rightarrow M_{Paradise} = \frac{rv^2}{G} = 1.7 \times 10^{43} kg = 8.67 \times 10^{12} M_{\odot}$$

Paradise has an estimated mass of 8.67 trillion solar masses ( $M_{\odot}$ ). By comparison, recent studies of the Andromeda galaxy estimate its mass at about one trillion solar masses ( $10^{12} M_{\odot}$ ).<sup>[31][35]</sup> The mass of Paradise is approximately nine times greater than the mass of Andromeda. Using this estimate of 8.67 trillion solar masses permits a calculation of the event horizon surrounding Paradise.

$$r_s = \frac{2GM}{c^2} = 2.7 \text{ ly}$$

Fig. 17: **The First Four Circuits of the Central Universe**  
 32.5 light-years to the first Havona circuit of 36 million worlds

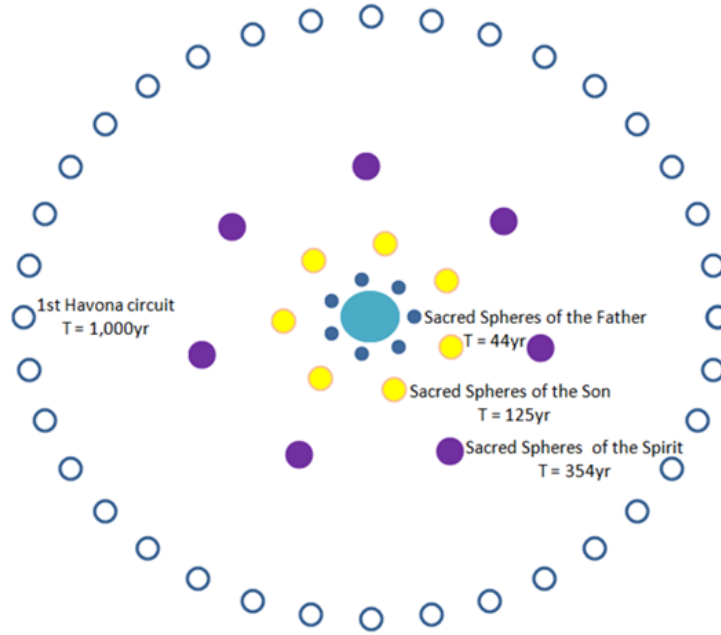


Table 4: **Paradise and the First Four Circuits**

<i>Circuit</i>	<i>radius</i>	<i>radius (ly)</i>	<i>T (years)</i>	<i>v/c</i>	<i>km/s</i>
Paradise	0.083 <i>r</i>	2.7			
Father	0.125 <i>r</i>	4.1	44	0.577 <i>c</i>	172,908
Son	0.250 <i>r</i>	8.1	125	0.408 <i>c</i>	122,315
Spirit	0.500 <i>r</i>	16.2	354	0.288 <i>c</i>	86,490
1 <sup>st</sup> Circuit	<i>r</i> =1.00	32.5	1,000	0.204 <i>c</i>	61,158

The sacred spheres of the Father are taken to orbit at one-eighth of the radial distance to the first Havona circuit or 4.1 ly (1.5 times the Schwarzschild radius.) The maximum radius of Paradise is 2.7 ly. The Father’s worlds have a velocity of 0.577*c*. The angular velocity equals the orbital velocity divided by the radius.

$$\omega = \frac{v}{r} = \frac{0.577c}{4.1 \text{ ly}} = 4.51 \times 10^{-9} \theta/s$$

The period of revolution for the Father’s worlds equals  $2\pi$  divided by the angular velocity.

$$T = \frac{2\pi}{\omega} = \frac{2\pi}{4.51 \times 10^{-9} \theta/s} = 1.395 \times 10^9 \text{ s} = 44.2 \text{ yr}$$

The orbital radius of the Son's worlds is assumed to be twice that of the Father's, and their orbital velocity of  $0.408c$  can be calculated using the mass of Paradise.

$$v_{Son} = \sqrt{\frac{GM_{Paradise}}{8.1 \text{ ly}}} = 0.408c$$

From the radius and orbital velocity the angular velocity and period or revolution can be calculated for the Son's sacred spheres. The distance to the worlds of the Infinite Spirit is assumed to be twice that of the Son's, and the same steps can be followed to find the orbital velocity, angular velocity, and period for the worlds of the Infinite Spirit.

### 3. The Seven Havona Circuits

There are 35,714,286 worlds in the first circuit of Havona worlds, and they "follow each other in an orderly linear procession," <sup>14:1.10</sup> traversing the same orbital path about Paradise. This orbital path appears is perfectly stable. "The control and balanced stability of the central universe appear to be perfect." <sup>14:2.9</sup> Gravitational stability and balance requires a symmetrical distribution of mass in this circuit, particularly because of the enormous orbital velocity. With a circumference of 204 light-years, these 36 million worlds should be equally separated from each other by 0.36 astronomic units (AU), which is the unit of distance from the earth to the sun. If these worlds are comparable in size to the architectural headquarters worlds, which are 100 times larger than earth, then neighboring Havona worlds would subtend an arc of 1.35 degrees in the sky. This is about 2.6 times the apparent sizes of both our sun and moon, which subtend 0.5 degrees of arc in our sky.

There are twice as many worlds in the second circuit, three times as many in the third circuit, and so on. If the spacing between worlds in a circuit is constant from one circuit to the next, then the radius of the second circuit would be twice that of the first, since doubling the radius doubles the circumference. This is a simple assumption, but the spacing between worlds in different circuits could

vary, which would cause the radial distance of each circuit from Paradise to vary in a more complex manner. The orbital radii of the first four planets in our own solar system give us a physical pattern from which to reason about the spacing of the Havona circuits. Our solar system and the central universe both revolve in a gravitational plane under the force of linear gravity.

Fig 18: **The Central Universe of Havona**  
Dark gravity bodies at a radius of 325 light-years

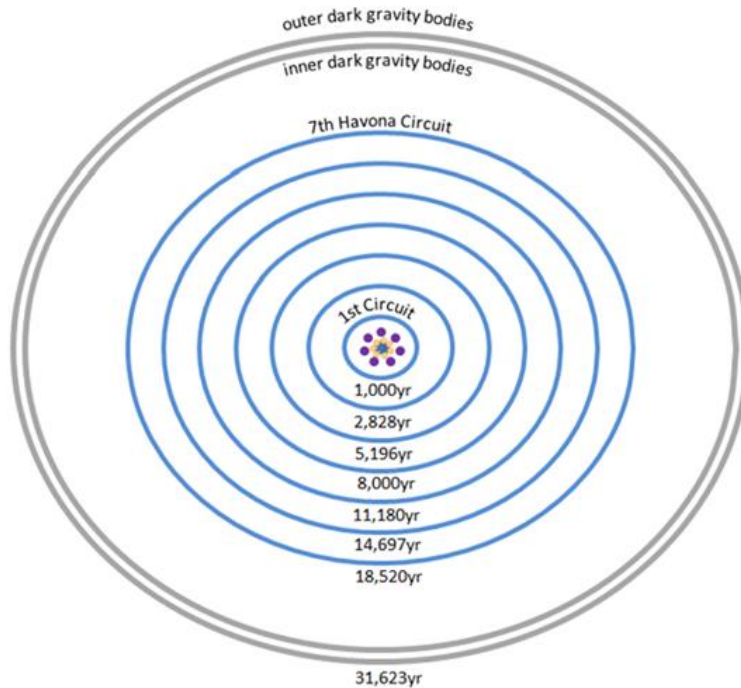


Table 5: **Circuits of the Central Universe of Havona**

<i>circuit</i>	<i>radius</i>	<i>radius (ly)</i>	<i>T (years)</i>	$T_{n+1}/T_n$	<i>v/c</i>	<i>km/s</i>
Paradise	0.083 <i>r</i>	2.7	-	-	-	-
Father	0.125 <i>r</i>	4.1	44	-	0.577 <i>c</i>	172,908
Son	0.25 <i>r</i>	8.1	125	2.83	0.408 <i>c</i>	122,315
Spirit	0.5 <i>r</i>	16.2	354	2.83	0.288 <i>c</i>	86,490
1 <sup>st</sup> Circuit	1 <i>r</i>	32.5	1,000	2.83	0.204 <i>c</i>	61,158
2 <sup>nd</sup> Circuit	2 <i>r</i>	65.0	2,828	2.83	0.144 <i>c</i>	43,241
3 <sup>rd</sup> Circuit	3 <i>r</i>	97.5	5,196	1.84	0.118 <i>c</i>	35,306
4 <sup>th</sup> Circuit	4 <i>r</i>	129.9	8,000	1.54	0.102 <i>c</i>	30,576
5 <sup>th</sup> Circuit	5 <i>r</i>	162.4	11,180	1.40	0.091 <i>c</i>	27,348
6 <sup>th</sup> Circuit	6 <i>r</i>	194.9	14,697	1.31	0.083 <i>c</i>	24,965
7 <sup>th</sup> Circuit	7 <i>r</i>	227.4	18,520	1.26	0.077 <i>c</i>	23,113
DG Bodies	10 <i>r</i>	324.9	31,623		0.065 <i>c</i>	19,338

If the distance between the sun and Mercury is used as a unit of length, Venus is 1.9 Mercury-units from the sun, earth is 2.6, and Mars is 3.9. There is a very rough linear relationship between the orbit number and its distance from the sun in Mercury-units. Linear gravity causes the first four planets to find orbits at certain preferred distances, which are roughly whole multiples of the radial distance of Mercury. These orbits are preferred because of the phenomenon of orbital resonance.

In the evolution of the solar system, matter accreted into these four planetary orbits because of the gravitational instability caused at other radii by orbital resonance. Orbital resonance occurs when the periods of revolution ( $T$ ) for two neighboring orbits are related to one another by integral multiples, such as 2:1 (2.00), 3:2 (1.50), and 4:3 (1.33). Neighboring orbits with these ratios result in bodies repeatedly attracting one another at the same points in their orbits. Over time this cyclically repeating force causes their orbits to destabilize. The orbital period ratios between the first solar orbits avoid these frequency relationships: Venus-Mercury, 2.55; Earth-Venus, 1.63; Mars-Earth, 1.88.

If the radius of each subsequent Havona circuit is an integral multiple of the radius of the first circuit, their periods of revolution do not have integral relationships which would cause orbital perturbations. This provides some justification for the assumption that the Havona circuits are spaced at integral multiples of the distance to the first Havona circuit.

The orbits in the central universe are shown as elliptical, having the same form and orientation as the Isle of Paradise, which has a major axis of seven units and a minor one of six units. All of the space levels are elliptical in form: "the endless circuits of the elliptical space levels of the master universe." <sup>11:8.2</sup> In the central universe, "The great belt of dark gravity bodies is divided into two equal elliptical circuits by a unique space intrusion." <sup>14:1.15</sup> Under Bertrand's theorem, the inverse-square force of linear gravity must act from one of the two foci of the ellipse in order to produce a stable orbit. However, Paradise is shown at the geometric center of concentric ellipses, as though the stable orbits are caused by the directly proportional force of absolute gravity. The dimensions of Havona are too small for absolute gravitational force to be significant. It may be that Paradise is actually at one of the two foci of these concentric ellipses. It may also be the case that the elliptical halo of dark gravity bodies permits the linear gravity of Paradise to act from the geometric center.

## 4. Dark Gravity Bodies

The radial distance to the dark gravity bodies from Paradise is shown as ten times the radius of the first Havona circuit, but this is not well supported. The gravity bodies are “far out beyond the seventh belt of Havona worlds,” 14:1.14 which could mean ten or a hundred times the radius of the first Havona circuit. The assumption of a factor of ten finds some small support in the idea that “the number ten, the decimal system, is inherent in energy, matter, and the material creation.” 42:9.2 A more reasonable justification for assuming a radius of this magnitude is that these dark gravity bodies constitute the majority of mass in the central universe.

“Owing to the enormous encircling masses of the dark gravity bodies about the fringe of the central universe, the mass content of this central creation is far in excess of the total known mass of all seven sectors of the grand universe.” 12:1.10 The Isle of Paradise has an estimated mass of ~9 trillion suns. Since the seven superuniverses potentially contain 70 trillion suns, the mass of the dark gravity bodies must be “far in excess” of 61 trillion suns. These bodies also exert both absolute and linear gravity, like Paradise. “The dark gravity bodies encircling Havona are neither triata nor gravita, and their drawing power discloses both forms of physical gravity, linear and absolute.” 11:8.7

Absolute gravity holds the master universe together as a central force which varies in direct proportion to the distance from Paradise. The nearer the dark gravity bodies are to Paradise, the more their absolute gravity pull becomes indistinguishable, on a cosmic scale, from that of Paradise. The radial distance from Paradise to the inner borders of the seven superuniverses is somewhere in the neighborhood of five million light-years, as shown in a later section. A radial distance from Paradise to the dark gravity bodies of 325 light-years is less than one ten thousandth of five million light-years. The absolute gravity of a dark gravity body acting on superuniverse ultimatons would be exerted from a point which is effectively indistinguishable from the location of Paradise. If the radial distance from Paradise to the dark gravity bodies was significantly greater than this, the angular difference between these two points of attraction becomes increasingly significant. Since absolute gravity acts upon the master universe from the geometric center of the universe, this argues for a smaller distance between Paradise and the dark gravity bodies.

There is some additional circumstantial evidence supporting this distance to the dark gravity bodies. The central universe is the pattern for a single system functionally unified by linear gravity. Our solar system should imperfectly reflect this pattern. The first planet is Mercury with an orbital radius of 0.387 AU and a period of revolution of 87.97 (earth) days. The last planet in the solar system is Neptune, which is at a distance of 30.1 AU and revolves about the sun once every 60,190 days. The dwarf non-planets of Pluto, Haumea, and Makemake are the larger objects in the Kuiper belt. This region is about 20 AU beyond Neptune and contains many small bodies, in the same way the asteroid belt between Mars and Jupiter is filled with small bodies.

The orbital radius of Neptune divided by that for Mercury gives a ratio of 77.8. The ratio of their periods of revolution is 684. Using the radius of the first Havona circuit as a unit of measure, the first orbit of the Father's spheres is at  $0.125r$  and that of the last orbit of the dark gravity bodies is at  $10r$ , which gives a ratio of 80. This is 2.8 percent greater than the ratio of 77.8 found for the solar system. The ratio of their periods of 31,623 years and 44 years is 719, which is 5.1 percent greater than the ratio of 684 found for the solar system. This parallel between the first and last orbits in the solar system and the central universe gives some additional support to the inferred size of the central universe.

The wall of dark gravity bodies "so completely encircle and enshroud Havona as to hide it from the view of even near-by inhabited universes of time and space." 14:1.14 Although this wall of dark gravity bodies hides Havona from our view, it does not interact with physical-energy light. "These dark gravity bodies neither reflect nor absorb light; they are nonreactive to physical-energy light ..." 14:1.14 Apparently, there is non-physical light energy emanating from Havona which is potentially detectable by us, but it is blocked by the dark gravity bodies. Since the wall of dark gravity bodies blocks the non-physical light of Havona but is transparent to the physical light of the universes, we might expect to see physical light originating in the central universe. However, Havona is constituted of a physical energy called *triata*, which is fundamentally different from the order of energy constituting the superuniverses, *gravita*. Radiant energy in the superuniverses is electromagnetic in nature. The radiant energy from *triata* must be fundamentally different in nature from electromagnetic radiation, which would make it undetectable by our observational instruments.

A Perfector of Wisdom tells us that the seven sacred worlds of the Eternal Son shine with the "impersonal energies of spirit luminosity ... they illuminate all Paradise and Havona, and they directionize pure spirit luminosity to the seven superuniverses. These brilliant spheres of the second circuit likewise emit their

light (light without heat) to Paradise and to the billion worlds of the seven-circuited central universe." 13:0.4 The Divine Counselor tells us that "Light, that is, light without heat, is another of the nonspiritual manifestations of the Deities." 3:2.3 There is a spirit luminosity emanating from seven sacred worlds of the Eternal Son which is directionized to us. These spheres also shine with light without heat, and this nonspiritual light is apparently blocked by the encircling wall of dark gravity bodies.