Physics of the Celeritron and Universe

Abstract

This article has a four fold purpose as follows: 1) To identify the point of origin of the universe, 2) To reconcile the Big Bang expanding universe theory with a steady state universe, 3) To identify the location of all anti-matter in the universe and 4) To identify a possible source and location of unobserved mass needed to explain the observed rotation of galaxies that appear to require additional gravity from unobserved mass or dark mass to explain their rotation. The article is a theory paper and does not prove its conclusions by experimental evidence. It is a work in progress and is intended to be updated as more information can be added.

The universe began with a point of origin that still exists and is the newly named and previously undefined point or particle called the "Celeritron". The Celeritron's position is fixed at the origin and there is only one Celeritron in the universe. The Celeritron is polarized, one pole at the origin, one pole at infinity extruding everything that exists in the universe including time in an "mc" wave of mass and light. Since the universe is thought to be expanding at the speed of light and since time does not exist at the speed of light, the source of the expansion must still be at time zero, or the origin, and would therefore be the infinity pole of the Celeritron with infinity defined as being the distance from the infinity pole of the Celeritron to the origin pole of the Celeritron constantly increasing in distance at the speed of light. Energy for the Celeritron to extrude the "mc" wave comes from its spin, both mass and spin energy of the Celeritron are decreasing as the "mc" wave is extruded. The "mc" wave has a DNA like helix structure due to the spin of the Celeritron at the infinity pole extrusion point. Quantum electron orbitals are extruded electron orbital lines with the infinity pole of the Celeritron at their source. Gravitational bending of time space orbitals at the Celeritron infinity pole makes it possible for the Celeritron to extrude the "mc" wave into all the quantum electron orbitals simultaneously. Time only exits while the Celeritron is extruding the "mc" wave during half of its cycle, while the other half there is no extrusion as the "mc" wave re-enters the Celeritron to recharge mass and spin energy. The Universe was created at the joining of the "mc" wave with the Celeritron "c" as an integration = $m \int_0^\infty 2c \ dc$ resulting in the total energy equation $E = mc^2 + a$ constant of integration "a". "a" is negative and equal to $-mc^2$ to keep total energy in balance at zero. Negative "a" indicates the Celeritron and "mc" wave are in a repeating cycle with mass and energy transferred back and forth between the Celeritron and wave. Dark mass is mass contained within the Celeritron that has not been extruded, something like a playing movie film that has not been projected on the screen yet, and is decreasing over time until it reaches zero while dark energy is increasing until it reaches "a" or -mc². Re-entry of "mc" wave into Celeritron restores mass and spin energy in a continuing cycle. The Celeritron is made of anti-matter and remains inside the Celeritron as the positive matter "mc" wave is extruded and is reunited and canceled when the "mc" wave re-enters the Celeritron.

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1. Introduction

The universe began with a single point of origin that still exists today and is the newly named and previously undefined "Celeritron". The Celeritron is polarized with one pole at the origin and one pole at infinity¹ extruding everything that exists in the universe including time and space in the form of an "mc" wave of mass and light for each electron orbital. Since the universe is thought to be expanding at the speed of light and since time does not exist at the speed of light, the source of the expansion must still be at time zero, or the origin, and would therefore be the infinity pole of the Celeritron. The position of the Celeritron is stationary at the origin and it is not in motion other than its spin. It has zero velocity because extruded electron orbitals or lines of force from the infinity pole are joined back to the origin pole keeping Newton's Laws of motion in balance. Quantum electron orbitals are extruded electron orbital lines with the infinity pole of the Celeritron at their source. At the two boundary conditions of the universe, the origin and infinity poles of the Celeritron, all of the time space electron orbitals are joined, which indicates time space bending due to electrically related gravitational force and is how the Celeritron is able to extrude the "mc" wave into all the quantum electron orbitals simultaneously and at equal distance from its infinity pole. Energy for the Celeritron to extrude comes from its spin, which is decreasing as the "mc" wave is extruded. The "mc" wave for each electron orbital has a DNA like helix structure due to the spin of the Celeritron at the infinity pole extrusion point. The origin/infinity point or Celeritron exists at the boundary conditions of our Universe, Origin and Infinity, and outside our Universe, which makes it unobservable and has been inferred to be spinning and emitting at its infinity pole by observation of the helix structure of DNA in living organisms. The universe was created at the joining of the "mc" wave

with the Celeritron "c" in an integration of the light codes "c" from zero to infinity = $\mathrm{m}\int_0^\infty 2\mathrm{c}\ dc$ resulting in the total energy equation $E = mc^2 + a$ constant of integration "a". The "a" constant is negative and equal to minus mc² in order to keep the total energy in balance at zero and is equal to the origin to infinity distance or circumference of the first electron orbital "mc" wave at its maximum extrusion, which is approximately circular in shape and equal to $2\pi r$ where r is the radius of the first electron orbital. The negative "a" constant indicates the Celeritron and universe are in a repeating or beating cycle with energy and mass being transferred back and forth between energy in the Celeritron and mass in the "mc" wave. Anti-matter remains inside the Celeritron as the positive matter "mc" wave is extruded and is reunited and canceled when the "mc" wave re-enters the Celeritron. Dark mass is mass contained within the Celeritron in the form of energy that has not been extruded. Dark energy is contained the extruded "mc" electron orbital wave in the form of twist energy at the time of extrusion from the Celeritron. Dark mass, same as remaining mass of the Celeritron, is decreasing over time until it reaches zero, while dark energy is increasing over time until all dark mass has been extruded when dark energy reaches the "a" constant and is then equal to -mc2. Re-entry of the "mc" wave into the Celeritron restores mass and spin energy in the opposite direction to the Celeritron in a continuing cycle. The time it takes for a Celeritron cycle is the origin to origin distance of a complete Celeritron cycle, which is four times $2\pi r$ or $8\pi r$ (one $2\pi r$ left spin to extrude "mc" wave, a second $2\pi r$ for left spin "mc" wave to re-enter Celeritron, a third $2\pi r$ right spin to extrude "mc" wave and a fourth $2\pi r$ for right spin "mc" wave to re-enter Celeritron) to get back to the origin starting point completing an approximately circular figure eight extrusion absorption cycle to the origin with the Celeritron having the same spin. The universe may be a perpetual motion machine of infinite repeating cycles between the Celeritron and "mc" wave, but the possibility exists the universe is loosing spin and/or electron orbital energy in these repeating cycles and will eventually loose all its spin and electron orbital energy. Cell division within the Celeritron creates the electron orbitals with each generation of cell division within the Celeritron doubling the number of electron orbitals. Life is electrically based and originates from the Celeritron.

¹⁻ Infinity defined as being the distance from the infinity pole of the Celeritron to the origin pole of the Celeritron constantly increasing in distance at the speed of light.

2. Summary

- 1. There is one "Celeritron" in the universe and it is the point of origin of the universe.
- 2. The Celeritron is polarized with one pole at the origin (north by definition at time zero as are all other electron orbitals at the origin) and one pole at infinity (south by definition) extruding everything that exists in our universe including time and space in the form of an "mc" wave of mass and light into each electron orbital at the speed of light or infinity.
- 3. Since the universe is thought to be expanding at the speed of light and since time does not exist at the speed of light, the source of the expansion must still be at time zero, or the origin, and would therefore be the infinity pole of the Celeritron.
- 4. The universe is not expanding, it is beating like a heart and possibly contracting slightly after each beat, see the "a" or cosmological constant calculations on pages 11 and 12.
- 5. The electron orbital expansions of the universe are the electron quantum orbitals of the Celeritron and are estimated to number on the order of *10⁷⁹. The quantum electron orbitals are electron orbital lines extruded from the Celeritron with the infinity pole of the Celeritron at their source. Relativity indicates that at the two boundary conditions of the universe, the origin and infinity poles of the Celeritron, all of the time space electron orbitals are joined, with the origin pole having the single first electron orbital and the infinity pole extruding all the current approximately 10⁷⁹ electron orbitals simultaneously from its single infinity pole.
- 6. Everything is in motion away from the Celeritron, positive mass and light are extruded from the infinity pole of the Celeritron, along electron orbital lines. Human beings exist on the electron orbital lines near the infinity pole of the Celeritron. The mc² Celeritron has a left spin (by definition) from the integration of the two halves of the "c" code alternating between left and right spin in repeating Celeritron cycles.
- 7. Celeritron is made of anti-matter that remains inside the Celeritron as the positive matter "mc" wave is extruded and is reunited and canceled when the "mc" wave re-enters the Celeritron.
- 8. The Celeritron exists at the boundary conditions of our Universe, Origin and Infinity, and outside our Universe, which makes it unobservable and has been inferred to be spinning and emitting at its infinity pole by observation of the helix structure of DNA in living organisms.
- 9. The beginning of the life cycle of the universe is estimated to follow the progression described on the following pages from 5 to 14. Also attached are question and thought pages, editing notes and references.

3. Discussion

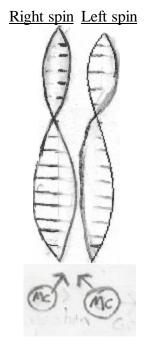
A single Celeritron extruding time and space in the form of an "mc" wave results in a universe of repeating cycles with the only changes being the spin of the Celeritron alternating from left to right and minor or small evolutionary changes due to defects in the recombination of the light code "c" of the E=mc² + "a" constant of integration equation. In 200 billion years or so (however long it takes for the Celeritron to extrude the remaining dark mass it contains and then for the "mc" wave to re-enter the Celeritron charging it with mass and a reverse spin) the universe cycle will repeat. The Universe may be a perpetual motion machine, but it is possible the universe is loosing electron orbital and/or spin energy during the repeating cycles and will eventually loose all its electron orbital/spin energy. The events or history of the current universe are the basic code "c" of the "mc" wave with the other half of the "c" code contained in the Celeritron "c" which combine to form the c² code of the succeeding universe with only minor evolutionary changes.

^{*}Wikipedia, Electron article, In the universe section, via Internet, see Reference 8 for detail.

4. Pre-Universe Configuration

The Celeritron "c" exists as an open cylinder and is made of anti-matter. It has no motion or mass from "mc" wave, there are no electron orbitals of force, the Universe does not yet exist.

"mc" wave(s)







Wave Properties

"mc" wave is composed of mass in the form of quarks and light, it can be either left or right spin. The little lines coming out from the waves are bonding points at time of entry.

Celeritron Properties

Celeritron has light code "c" and is made of anti-matter.

The "mc" wave joins with the Celeritron "c" adding mass and spin energy to the Celeritron. The spin causes the Celeritron to spin into the shape of a sphere point. The joining can be either a left spin or right spin "mc" wave, alternating at each re-entry of the "mc" wave back into the Celeritron "c". The joining of the wave component with the Celeritron, like a DNA replication, creates the rules of the Universe by combining the two halves of the "c" code.

9-8-2006 Revised 9-14-2006

5. Initial Universe Configuration

The Universe is created as the Celeritron and wave are united in single spinning sphere point. No electron orbitals exist outside Celeritron. The Celeritron is spinning from twist in "mc" wave as it entered Celeritron and also added mass to Celeritron. It exists at time zero with anti-matter and matter combined at this point. All electron orbital lines originate from this point.

Bottom View Side View "mc" wave wound onto Celeritron "c".

Celeritron Properties

Celeritron is all one cell at origination point. Left spin shown from way "mc" wave joined with Celeritron "c". Spin can be either left or right and alternates depending on wave at time of re-entry.

Celeritron Wave Integration

At initial joining wave is joined with Celeritron as "mc" + "c" = m2c. As the wave joins or merges with the Celeritron there is an integration of the light codes 'c" from zero to infinity \int_0^∞ m2c $dc = \text{mc}^2 + \text{a}$ constant of integration "a"*. The Universe is now created or alive, it exists. The two halves of "c" contain the code of the universe, everything about the universe is contained in the mass charged fully spinning Celeritron, but light and mass do not yet exist outside the Celeritron. Anti-matter and matter combined at this point.

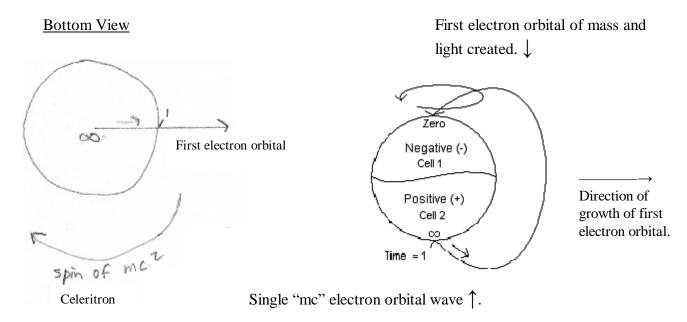
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^{*}See estimate for constant of integration "a" on pages 11 and 12.

6. Universe at First Electron Orbital Creation

Celeritron has divided into two cells, first electron orbital created, mass and light now exist outside the Celeritron. The universe begins to grow outside the Celeritron in one electron orbital.

First electron orbital line is connected to but not absorbed back into the Celeritron. The connection point is the origin or outer boundary of the universe \downarrow .



The first electron orbital is created around the Celeritron due to cell division within the Celeritron. The electron orbital line contains both "m" mass and "c" light. The Celeritron is extruding in one electron orbital with the electron orbital increasing or growing at the speed of light. Anti-matter remains inside the Celeritron as the positive matter "mc" wave is extruded and is reunited and canceled when the positive "mc" wave re-enters the Celeritron.

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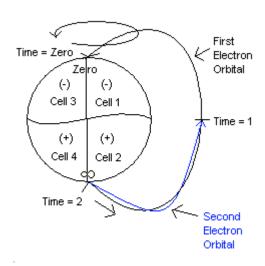
2-1-2009 Revised side view drawing.

7. Universe at Second Electron Orbital Creation

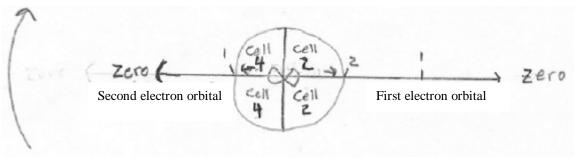
Celeritron has divided into four cells, second electron orbital created. The universe is growing or extruding outside Celeritron in two electron orbitals.

Side View Celeritron

Celeritron



Bottom View



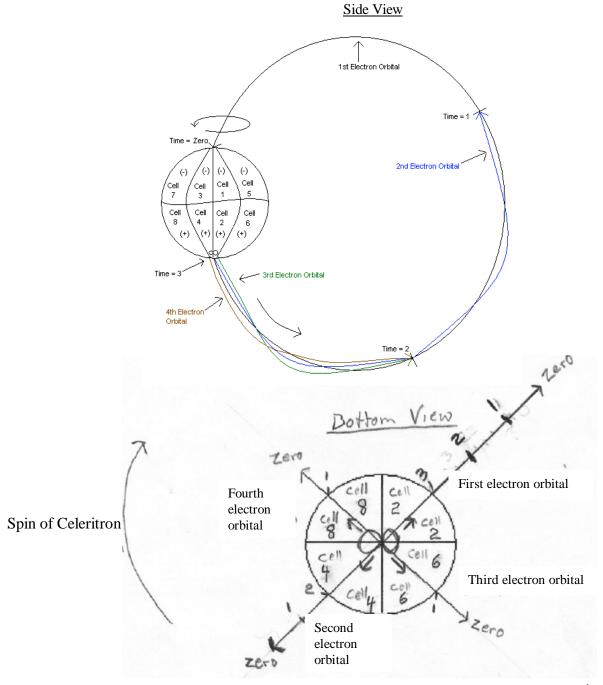
Spin of Celeritron

9-8-2006

2-1-2009 Revised side view drawing.

8. Universe at Third and Fourth Electron Orbital Creation

Celeritron has divided into eight cells, third and fourth electron orbitals created. Universe growing or extruding in four electron orbitals.



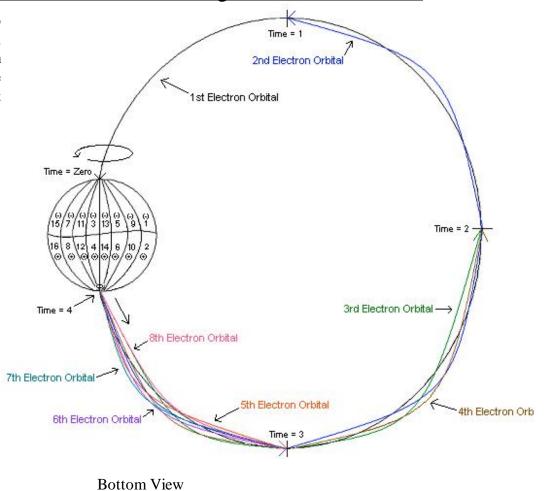
Bottom view electron orbitals approximately drawn to scale, 1^{st} electron orbital at three, 2^{nd} electron orbital at two with 3^{rd} and 4^{th} electron orbitals at one.

9-8-2006

2-1-2009 Revised side view drawing.

9. Universe at Fifth, Sixth, Seventh and Eighth Orbital Creation

Celeritron has divided into sixteen cells, fifth, sixth, seventh and eighth electron orbitals created. Universe growing or extruding in eight electron orbitals.



7th electron orbital

Zero

8th electron orbital 4th electron orbital 5th electron orbital 6th electron 3rd electron orbital

Bottom view electron orbitals not drawn to scale, 1st electron orbital at four, 2nd electron orbital at three with 3rd and 4th electron orbitals at two and 5th, 6th, 7th and 8th electron orbitals at one, assuming Celeritron cell division occurred at speed of light.

orbital

9-8-2006 2-1-2009 Revised side view drawing. 08/01/09 12:29 PM08/01/09

orbital

10. Estimate for constant "a" of Celeritron Wave Integration

 $E = \int_0^\infty m2c \ dc = mc^2 + a \text{ constant of integration "a" (Integration with respect to "c")}$

Set total energy E = 0, then $mc^2 = -a$

Re-arranging terms $a = -mc^2$

where

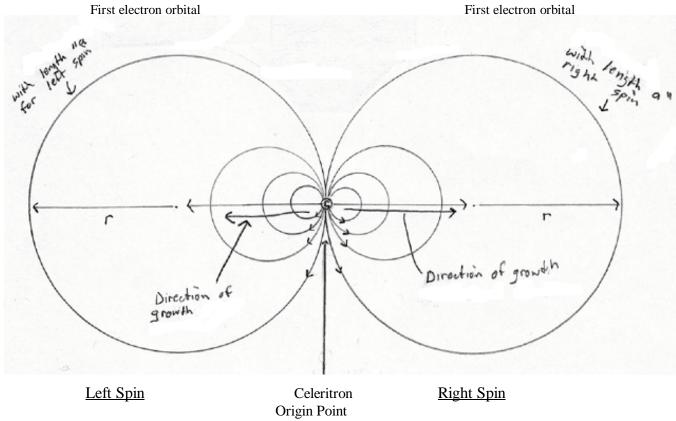
E = Energy

m = mass

c = speed of light "celeritas"

a = Constant of Integration

Constant of integration would be origin to infinity distance of first electron orbital or maximum circumference of either left or right shape. Approximating as a circle, circumference would be $2\pi r$.



Think left or right shape is an ellipse that can be approximated as a circle. Constant of integration "a" would equal origin to infinity distance or circumference of either left or right shape at maximum or $2\pi r$. The time it takes for the universe cycle is the origin to origin distance of the first electron orbital, which is four times $2\pi r$ or $8\pi r$ (one $2\pi r$ left spin to extrude the "mc" wave, a second $2\pi r$ for the left spin "mc" wave to re-enter the Celeritron, a third $2\pi r$ right spin to extrude the "mc" wave and a fourth $2\pi r$ for the right spin "mc" wave to re-enter the Celeritron) to get back to the origin starting point completing an approximately circular figure eight extrusion absorption cycle to the origin with the Celeritron having the same spin. The creation of a new universe does not appear to make a universe unique as left spin universe generates right spin universe in repeating cycles. Also it does not appear universes are infinite as they have a point of beginning.

Revised 10-16-2006

10. Estimate for constant "a" of Celeritron Wave Integration (cont.)

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a = -mc^2 where c = speed \ of \ light = 2.99792458 \ x \ 10^8 \ meters \ per \ second. {}^1m = mass \ of \ Celeritron \ or \ Universe = 1 \ x \ 10^{38} \ tonnes, \ where \ 1 \ tonne = 100,000 \ kilograms.
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Inserting terms

$$a = m$$
 times c^2
 $a = -(1 \times 10^{38} \text{ tonnes}) * (2.99792458 \times 10^8 \text{ meters per second})^2$
 $a^2 = -8.987551 \times 10^{54} \frac{\text{tonnes meters}^2}{2}$

If "a" remains constant from Celeritron cycle to Celeritron cycle then a perpetual motion machine is being described. If somehow the "mc" electron orbital wave looses some of its electron orbital energy or the Celeritron looses some of its spin energy during each cycle then eventually all of the electron orbital and spin energy could be lost and restore the universe to its natural zero state. It is thought the shape of the first electron orbital is not a perfect circle and is actually slightly elliptical so some electron orbital or spin energy could be lost on each Celeritron cycle.

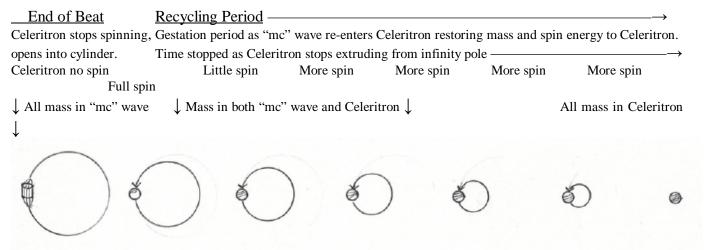
Revised 10-16-2006, page originated 9 12-2006

Notes: 1 Mass estimate from 16 December 2000 issue of New Scientist magazine article titled *Mass of the Universe*, accessed via Internet at I-mass.com web site at http://www.i-mass.com/muni0101.html.

^{2. &}quot;a" or Cosmological constant not right because the Celeritron is extruding mass into the universe – all of the mass extruded since initial creation still exists inside the Universe like a film projector adding today's film or mass to yesterdays film or mass as it is extruding "mc" electron orbital wave over time. Dark mass, unextruded mass inside the Celeritron, needs to be added to observed mass to get better estimate for "a" or Cosmological Constant. See Questions and Thoughts Questions 9 and 10 on page 18.

11. Formation Period of New Celeritron

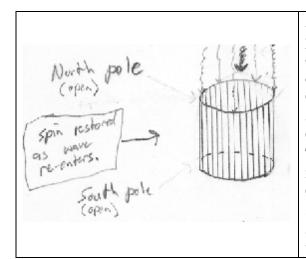
At the end of a Celeritron extrusion cycle all of its spin energy and positive mass has been extruded. It is a frozen "c" Celeritron composed of anti-matter while the "mc" wave contains all the mass and energy in the form of wound up or twisted electron orbital lines due to the spin of the Celeritron at the time of extrusion. At that instant the Celeritron opens into a cylinder and the origin pole of the Celeritron can except entry of the "mc" electron orbital wave. The new universe Celeritron is in a formation period for the same amount of time as the "a" or cosmological constant period of $2\pi r$ as the "mc" wave corkscrews into the Celeritron at the speed of light restoring mass and energy to the Celeritron with spin reversed from the previous extrusion cycle.



At the end of a beat, the Celeritron stops spinning and opens into cylinder, for an instant all of the energy is contained in the "mc" electron orbital wave. Time stops as the infinity pole stops extruding. The open cylinder configuration of the Celeritron allows re-entry of the "mc" electron orbital wave, and mass and spin is gradually restored to the Celeritron in opposite direction as the "mc" wave re-enters the Celeritron. The "mc" wave is restored to the Celeritron at the speed of light "c" and completes the re-entry portion of the cycle in $2\pi r$, the same amount of time it took the Celeritron to extrude the "mc" wave. At the end of the cycle the "mc" wave has been fully reabsorbed into the Celeritron and the Celeritron has all the mass and is at full or infinity spin. The Celeritron then begins to extrude from its infinity pole again, gradually loosing mass and spin energy. Electron orbital extrusion twist causes successive universes to alternate between left and right Celeritron spin.

12. Ending and Beginning Universe Configuration

At the end of the old universe, the extrusion from the infinity pole of the Celeritron stops as it runs out of mass and spin energy – time ends in an instant for the old universe but not the universe cycle.



At the instant the Celeritron runs out of mass and spin, the poles open into a cylinder allowing re-entry of "mc" electron orbital wave at the origin pole. The "mc" wave or twisted electron orbital extrusion lines can then re-enter the Celeritron. A cylinder and sphere have same outside surface area. As the "mc" electron orbital wave begins to re-enter the Celeritron, spin reverses and pole openings begin to close. This process is like the re-winding of a yo-yo in motion at the moment of reversal or rewinding of a film. While the Celeritron is "extruding", it is a closed or gradually opening sphere. While it is receiving the "mc" wave or recharging spin and receiving mass, it is a gradually closing open cylinder until fully recharged, then back to a spinning sphere point.

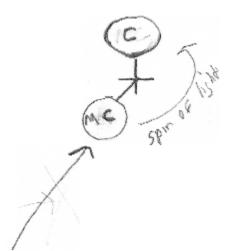
13. Spin of Celeritron

Depending on generation, generation's alternate spin from left to right.

Left Spin



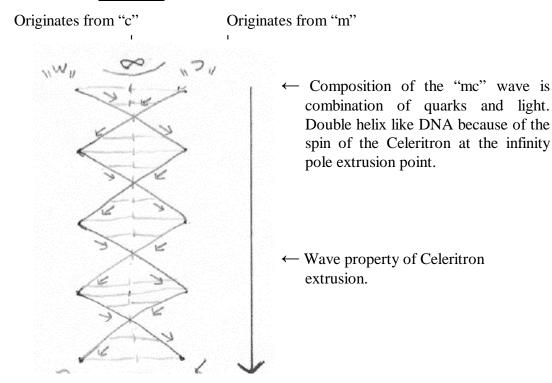
All left spin needed to build up twist in electron All right spin, all electron orbitals have same orbital lines to re-energize Celeritron with reverse extrusion spin. spin at time of re-entry.

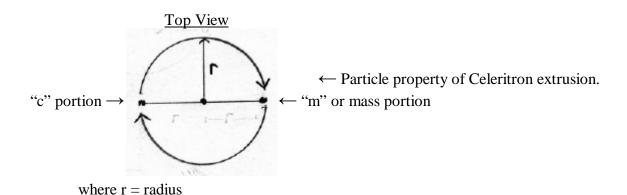


Right Spin

14. Detail of Celeritron Extrusion for Each Electron Orbital

Side View





Celeritron extrusion shown for left spin, right spin extrusion would have opposite or right spin. Coming straight on, Celeritron extrusion would look like two points with a thin bonding line between them spinning in a perfect or almost perfect circle with radius r.

15. Questions and Thoughts

- 1. What could have caused the initial wave and frozen Celeritron? Thought do not know, probably a parent universe.
- 2. What is the source of the growing universe being observed and why does it look like it is centered on the earth?

Thought – The infinity pole of the Celeritron is the source of the growing universe through the extrusion of mass and light, which generates time and space. Human beings exist closer to the infinity pole of the Celeritron so it just looks like we are at the center when really it is the infinity pole of the Celeritron.

Edited 10/14/2006 & 3/19/2009

- 3. What was the order of creation of the electron orbitals was it zero, one, two, three, etc... Thought the order of creation of the electron orbitals was 0, 1, 2, 4, 8, 16, 32, 64, 128, 256 etc... in a factor of two times the previous number of electron orbitals as cell division occurs within the Celeritron.
- 4. Is there a way to travel backward in time?

Thought – yes, approach the origin pole of the Celeritron, this is going back toward time zero in the universe, the closer the observer gets to the origin pole of the Celeritron, the closer the observer gets to time zero – telescopes lens toward the origin pole of the Celeritron.

5. Is there a way to travel forward in time?

Thought – yes, approach the infinity pole of the Celeritron, this is going forward in time to the origin of the future of the universe. The closer the observer gets to the infinity pole of the Celeritron, the closer the observer gets to time infinity or the future – microscopes lens toward the infinity pole of the Celeritron.

This article was written after watching the first three episodes of the Hyperspace series on DVD during the first two weeks of January 2006, re-watching the black hole episode last week and concluding a black hole must be at the center of the universe.

William Haugen Dallas, Texas January 29, 2006

Original Title – Points in the Universe Begun 1/28/2006 9:00AM. Edited 1/29/2006 8:40PM Finished 1/30/2006 3:00AM

15. Questions and Thoughts (Cont.)

Edited 1/30/2006 9:25AM, revised 8/9/2008 7:05PM, revised 3/19/2009 3:10PM

6. Is life based on the Celeritron and wave?

Thought – yes, all life is Celeritron based from the origin point of the universe. At the infinity level each and every life in the universe is based on the electron orbitals of the universe. Life (as we think of it on earth) begins as an extrusion from the infinity pole of the Celeritron and probably ends from stress due to electron orbital twisting or separation over time as the electron orbital lines move away from the infinity pole at the speed of light. Every living and non-living thing originates from the Celeritron point of origin.

Edited 9/6/2006, Re-edited 10/14/2006 adding 9th cell division and division sequence note, revised 3/19/2009 3:12PM to rename dimensions to electron orbitals.

7. What is the electron orbital Order of the Universe?

Thought – electron orbital order of the universe thought to follow following progression:

Celeritron Cell Division	ns 0	1	2	3	4	5	6	7	8	9	N
Cells within Celeritron	Point 1	2	4	8	16	32	64	128	256	512	$\dots 2^{N}$
	0										

Where N equal number cell divisions within Celeritron. The continuing sequence of the number of electron orbitals would be one half the number of cells in the Celeritron at the given cell division generation.

Added 9/6/2006, edited 10/14/2006

8. How many electron orbital extrusion lines are in the universe?

Thought – the number of electron orbital extrusion lines in the universe is on the order of 10^{79} based on the estimated number of electrons in the universe of approximately * 10^{79} . It is thought these electrons are actually electron orbital lines extruded from the Celeritron with the infinity pole of the Celeritron as their source. Relativity indicates that at the two boundary conditions of the universe, origin and infinity, all of the time space electron orbitals are joined, so the infinity pole of the Celeritron must be extruding in all these electron orbitals simultaneously from its single infinity pole. (*See reference 10. in Reference section)

Added 9/21/2006, edited 10/14/2006 to only include dark mass and added new question 10 for dark energy.

9. What is dark mass?

Thought – dark mass is mass contained within the Celeritron that has not been extruded. The Celeritron is thought to extrude or loose dark mass at the speed of light.

Added 10/14/2006, revised 8/9/2008 7:15PM, revised 3/19/2009 3:18PM, revised 8/1/2009 12:15PM 10. What is dark energy?

Thought – dark energy is contained the extruded "mc" electron orbital wave in the form of twist energy at the time of extrusion from the Celeritron and is thought to be growing as the "mc" electron orbital wave continues to be extruded from the Celeritron. If dark energy is related to the "a" or Cosmological constant, then the "a" or Cosmological portion would have an opposite charge to traditional energy since it is thought "a" = $-\text{mc}^2$. Dark mass is decreasing over time until it reaches zero while dark energy is increasing over time until it reaches "a" or the Cosmological constant.

16. Editing Notes

- 1. 1/28 and 1/29/2006 draft article titled "Points in the Universe" initially written after watching the first three episodes of the Hyperspace series on DVD during the first two weeks of January 2006, rewatching the black hole episode during the week of January 15th, 2006 and concluding a black hole must be at the center of the universe.
- 2. 9/6/2006 6:38PM to 9/12/2006 11:32AM edited article after watching the Nova *Galileo* and *Einstein's Big Idea* dvds Tuesday September 5, 2006 and Nova *Newton's Dark Secrets* and *Darwin's Dangerous Idea* dvds Wednesday September 6, 2006. Article also renamed 9/6/2006 to "Physics of the Electron and Universe".
- 3. 9/14/2006 and 9/15/2006 re-edited to change pre-universe waves to "mc" and pre-universe Electron to "c". Also changed pages 2,3,9 and 10 and question 1 to match consistency.
- 4. 9/26/2006 edited Summary item 6 to shorten and added additional information to question 9, added pages 12 and 13 written 9/14/2006 to draft PDF file.
- 5. 10/11 to 10/16/2006 electronically typed and formatted article. Split Question and Thoughts Question 9 into two questions now questions 9 and 10. Modified Summary items 5 and 6 and Thought Question 8 to increase estimated number of electron orbitals from minimum of 128 to on the order of 10⁷⁹. Re-wrote or edited sections 10, 11 and 12 and re-drew most of the graphics. Added Cover Page, Table of Contents, Abstract/Introduction, Discussion, Editing Notes and References.
- 6. 10/26/2006 re-wrote Abstract/Introduction, added dimensioning formulas to Question and Thoughts Ouestion 7.
- 7. 10/27/2006 re-wrote Abstract, Introduction, Summary and Discussion.
- 8. 10/28/2006 re-wrote Abstract and Introduction adding that dark mass is the same as total mass of the Electron and both are decreasing over time until they reach zero.
- 9. 11/9/2006 re-wrote abstract and added references 6. and 7.
- 10. 11/20/2006 re-drew graphic in section 11. Formation Period of New Electron to keep dimension line attached to infinity pole to keep laws of motion in balance while Electron recharged with mass & spin.
- 11. 8/9/2008 4:30PM to 9:30PM re-named article "Physics of the Centron and Universe" and re-defined origin point from a single "Electron" to a newly named and previously undefined point named the "Centron" after concluding there are multiple electrons but only one origin/infinity point or particle. Changed all references to the origin/infinity point previously named "Electron" to "Centron". Revised Abstract, Introduction, Summary and Questions and Thoughts for consistency. Also added *Cosmic Voyage*, IMAX DVD narrated by Morgan Freeman, written, directed and produced by Bayley Silleck and also produced by Jeffrey Marvin, © 1996 IMAX Corporation, © 1996 Smithsonian Institution and Motorola Foundation and © 2002 Warner Home Video, as reference, probably first watched in the second half of 2003.
- 12. 12/13-14/2008 5:00PM-6:00AM added following anti-matter discussion to article in Abstract, 1. Introduction, 2. Summary, 5. Initial Universe Configuration and 6. Universe at Dimension Creation Anti-matter is separated out and remains inside the Centron as the positive matter "mc" wave is extruded and is reunited and canceled when the "mc" wave re-enters the Centron.
- 13. 2/1/2009 10:15AM re-drew four side view of drawings on pages 7, 8, 9 and 10 of 1) Universe at First, Second, Third and Fourth and Fifth, Sixth, Seventh and Eighth Dimension Creation to better show twisting of extruded dimensions and spin of Centron.
- 14. 3/15/2009 Renamed origin point from "Centron" to "Oritron" as being more descriptive name.
- 15. 3/19-3/20/2009 Renamed origin point from "Oritron" to "Celeritron" as being more descriptive name and re-wrote article to indicate Celeritron cell divisions create "mc" electron orbital wave extrusions.
- 16. 8/1/2009 10:00AM renamed dimension extrusions to electron orbitals as being more descriptive. 08/01/09 12:29 PM08/01/09

17. References

- 1. Hyperspace DVD, first three episodes; 1) Star Stuff, 2) Staying Alive and 3) Black Holes, BBC Video, © 2001.
- 2. Nova DVD, Galileo, WGBH Educational Foundation, © 2002 and 2006.
- 3. Nova DVD, Newton's Dark Secrets, WGBH Educational Foundation, © 2003 and 2005.
- 4. Nova DVD, Darwin's Dangerous Idea, WGBH Educational Foundation, © 2001.
- 5. Nova DVD, Einstein's Big Idea, WGBH Educational Foundation, © 2005.
- 6. A Science Odyssey DVD, *Mysteries of the Universe*, WGBH Educational Foundation, © 1998, DVD © 2005.
- 7. Strange Case of the Cosmic Rays DVD, host Dr. Frank Baxter, written produced and directed by Frank Capra, © 1957 N.W. Ayer & Son, Inc., DVD © 2003 Image Entertainment, Inc.
- 8. Calculus textbook, Lynn H. Loomis, Addison Wesley Publishing Company, Inc., Third Printing, © 1974, Library of Congress Catalog No. 73-8241. Chapter 1, Section 1. Coordinates p.2 and Section 8. Translation of Axes pp. 39-41, Chapter 3, Section 4. Some General Results about Derivatives p.100 and Chapter 8, Section 1 The Antiderivative pp. 300-301.
- 9. New Scientist magazine, 16 December 2000 issue, article *Mass of the Universe*, accessed via Internet I-mass.com web site at http://www.i-mass.com/muni0101.html.
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- 11. Archimedes on Spheres and Cylinders, MathPages.com web site at http://www.mathpages.com/home/kmath343.htm.
- 12. Cosmic Voyage, IMAX DVD narrated by Morgan Freeman, written, directed and produced by Bayley Silleck and also produced by Jeffrey Marvin, © 1996 IMAX Corporation, © 1996 Smithsonian Institution and Motorola Foundation and © 2002 Warner Home Video.