

Dark Matter as a Support Mechanism for the Electromagnetic Field, and the Fatal Flaws in Einstein's Special and General Theories & Photons

Keith D. Foote
Ann Arbor, MI

The characteristics and behavior patterns of dark matter are examined and described as a support mechanism for the electromagnetic field. Flaws in Einstein's models are examined and compared with an updated version of the aether as dark matter.

The supporting evidence for dark matter comes from the behavior of solar systems orbiting the outer edges of galaxies. The gravity from dark matter affects the outer stars orbiting galactic cores (black holes at the center of the galaxy). Theoretically, galaxies just don't have enough mass/gravity to pull solar systems that far away, moving at those speeds, into a stable orbit. Those solar systems should be moving off on a much more independent path, or moving much more slowly. A brief history of dark matter is available at the end of this thesis.

Dark matter is considered to make up most of the universe's total mass. It is called dark matter because there is no visual sign of its existence. It seems to be invisible, neither emitting light, nor absorbing it. The Ultra-Space Field Theory describes dark matter as a transport mechanism for light as quanta. Lacking visual confirmation, its existence is suggested from the gravitational attraction and behavior of visible matter, and the structure of the universe. It is estimated dark matter provides about 85% of the gravity in the universe.¹ The current general consensus of cosmologists on dark matter has it composed of unknown subatomic particles. There are unvalidated claims (UVCs) of dark matter observations available on the internet.

Supporters of the Standard Model have little success with dark matter.² Dark matter exists outside of their paradigm and represents a threat to the photon model. The modern particle physics community promotes an extreme philosophy of reductionism, the desire to reduce the universe to its simplest components. Mathematics is an example of reductionism. It reduces two apples and two oranges to the number four. Obviously, even a single piece of real fruit is much more than the mental concept of four. You can eat a piece of fruit. It has volume, texture, flavor. It keeps you alive. It exists in reality. A number is a mental tool. Useful to be sure, but it does not exist as a part of nature. It cannot be felt, tasted, seen, or heard except in a symbolic form. It is a mental construct. The number four does not exist until it is

applied. The belief numbers and equations are more impressive than reality results from an interesting combination of a self-induced trance, awe, and ego. (Actually, a rather heady combination for the tightly focused individual, and except for the ego part, can feel very much like spirituality.) A faith based form of tunnel vision is a consequence of extreme reductionism. The reductionistic philosophy is not associative by nature, and as a consequence, the problems of photons passing through dark matter (85% of the universe's mass) without interference, simply hasn't occurred to most particle physicists. The photon requires a vacuum to travel through. The concept of aether drag at subatomic levels is forbidden by Einstein's claim the aether is 'unnecessary'. Also, Standard Model physicists have been occupied creating the Higgs boson as a model of resistance³, an alternative to dark matter/aether drag. Unfortunately, the Higgs boson does not explain the gravitational pull of dark matter and cannot be used in explaining dark matter.

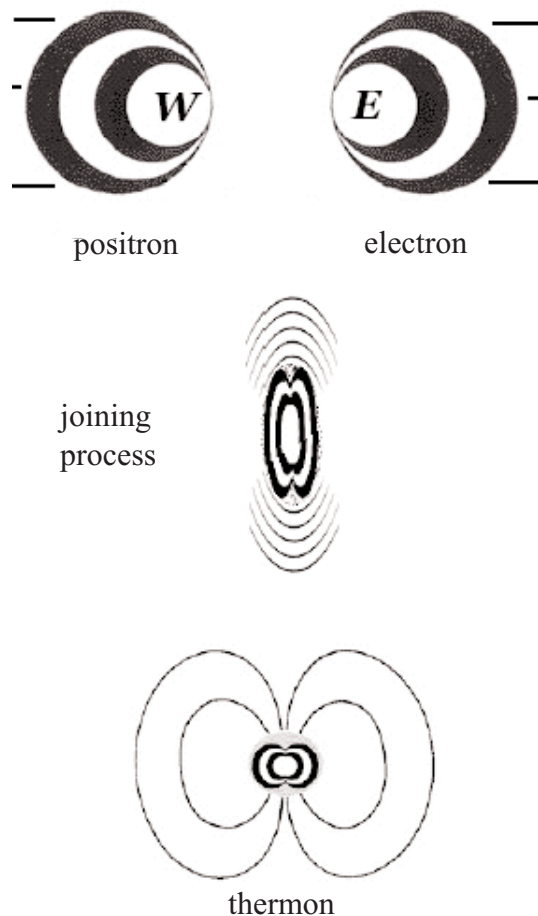
The 'threatened' photon model was originally developed as an alternative to 'light as electromagnetic waves'.⁴ It was taken from Maxwell Planck's model of quanta. The two models are not compatible and cannot exist simultaneously. Lacking computers in the 1900s, the photon model was developed by Albert Einstein as a way to simplify math equations for light. Photons were predicted to follow a straight line while traveling through a vacuum, making for easy math. Electromagnetic waves are transported through an invisible medium existing in all of space and are much harder to calculate. (Especially without a computer, and if the waves are erroneously described as transverse.) After using the aether in his Special Theory of Relativity, Einstein dropped it as unnecessary because it conflicted with his model of photons traveling through the vacuum of space. Mathematicians applauded the simplification.

Quanta, discovered by Maxwell Planck in 1900,⁵ are described as parcels o' kinetic energy passing from one oscillator to the next in the EM field. The photon is described as a massless, chargeless particle existing only while traveling at the speed of light. If the word "particle" is eliminated from the photon's description, it suddenly sounds like a bit o' kinetic energy traveling through a medium. The word 'particle' suggests the ability to travel in a straightline. Recent diffraction experiments show individual photons 'do not' travel in a straight line, but tend to meander in the general direction they were aimed. This behavior has been explained as 'Single Photon Interference'⁶, and describes the photon as mystically interfering with itself.

The model of light as quanta seems to provide a more accurate description of reality than the model of photons as particles. Quanta, as parcels of kinetic energy in the electromagnetic field, are under no obligation to follow a straight line as they pass from one oscillator to the next. The medium transporting these parcels of kinetic energy was called the aether. Dark matter presents gravity as aspect of the aether, and as a consequence allows for evolution of the aether model. The Ultra-Space Field Theory predicts thermons, joined electron/positrons, are the oscillators in Planck's model of light as quanta.⁷ Thermons are also another name for dark matter.

The USF Theory describes electrons and positrons as subatomic energy fields, with no true surface area and no gravity field. They are not reduced to negative and positive ones, but described as east and west monopoles per the East-West Geomagnetic Effect. Their repulsive and attractive behaviors are consistent with the north and south poles of magnets. The forces electric (and magnetic) energy fields exert upon one another vary inversely with distance, as does gravitational attraction, and from an associative perspective, there would seem to be an undeniable relationship.

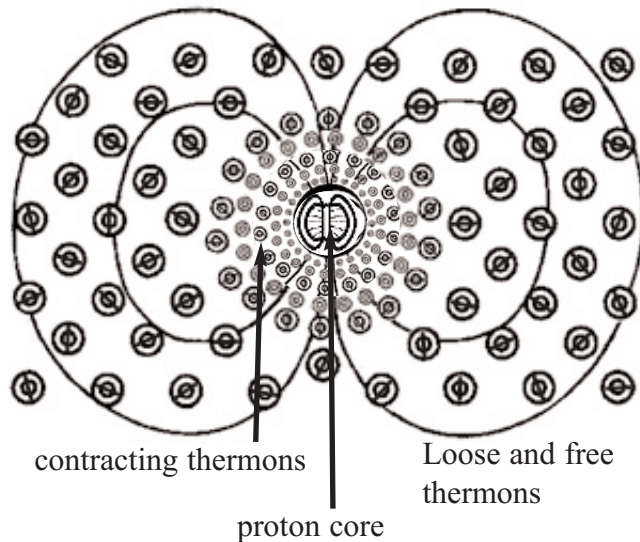
Electrons and positrons, as energy fields lacking a true surface area, are predicted to join, creating an ultrasubatomic, coulombic black hole. The two energy fields neutralize one another. They do not annihilate one another in an effort to equal zero. These joined electron-positrons contract in on one another, perpetually transforming their electrical energies into a magnetic field while simultaneously contracting the surrounding space. The resulting complex of energy fields is called a thermon. It transports electromagnetic waves and generates a very, very weak gravity field. (As it turns out, Paul Dirac developed a similar model in 1928 describing the process of pair produc-



tion, predicting electrons were created simultaneously with anti-electrons. This functional model of pair production was discarded because it did not support space as a vacuum and, consequently, light as photons.⁸⁾

The thermon provides a model for gravity as the electrical contraction of space.

In the emptiness of outer space, the USF theory predicts thermons are very loosely organized and provide a foundation for the electromagnetic field and electromagnetic waves. In the space between galaxies, this model predicts thermons are significantly larger, and spread very thinly, with EM waves traveling at faster speeds. Closer to a gravity core, thermons are more compressed and exist in higher concentrations, with light slowing as the medium becomes denser. The event horizons of black holes are where thermons are being drawn in at faster than light speeds. Within matter, the EM field is called the thermal field, and thermons are much more compressed, due to the concentrated gravitational attraction of protons. The movement of loose and free thermons represents the flow of heat.



Einstein's Special Theory of Relativity⁹ used the 'luminiferous aether', the most advanced model at the time, and considered to be the supporting foundation of the electromagnetic field. The luminiferous aether was believed to be distributed uniformly throughout the universe. (Dark matter tends to gradually condense around a gravity core, but is also considered to exist throughout the universe). Due to the luminiferous aether's uniformity, light was considered to travel at the same speed, regardless of circumstances. This version of the aether does not allow for the concept of 'contained environments', as the luminiferous aether is unmoving and permeates all matter. Planets and matter push through the nonmoving luminiferous aether in the way a sphere of chicken wire might move through jello.

With this kind of a model you can better understand the Michelson-Morley¹⁰ experiment. With light traveling at a constant speed, they expected light from stars our

planet was approaching to be moving faster than light from stars which were receding. If you're in a motorboat traveling upriver, from your perspective the water is moving past you faster than it would if you were moving downstream. Michelson and Morley were surprised to find light traveled at the "same speed" regardless of whether they were moving towards or away from a star. Einstein's Special Theory of Relativity states this phenomenon is the result of 'time as a variable' and 'dependent on the speed of the observer.'

The Ultra-Space Field Theory predicts the "speed" of light is 'dependent on the density of the medium transporting it.' A gravity source will increase thermal density, slowing the speed of light and creating a self-contained environment. Moving toward, or away, from a light source will not increase or reduce its speed. In this model, time is not described as a variable.

Later, in his General Theory of Relativity¹¹, Einstein used gravity as a form of speed, predicting time would slow for observers as gravity increases. One test suggested by Einstein as proof for his General Theory of Relativity was a prediction of the 'gravitational redshifting of light'. Einstein predicted as light entered Terra's gravity field, the speed of light would remain constant to observers, but due to gravity, the light itself would undergo a slowing of time, expressed as a redshifting of the light. As it turns out, the opposite is true. Light blueshifts as it enters a gravity field. Efforts to twist this failure into a success use the Mössbauer effect and energy equations.¹²

The Ultra-Space Field Theory explains the blueshifting of light as similar to when light passes from a vacuum to air, or from air to glass. As the density increases, the speed of light slows and the frequency increases (blueshifting). This is a well established fact.

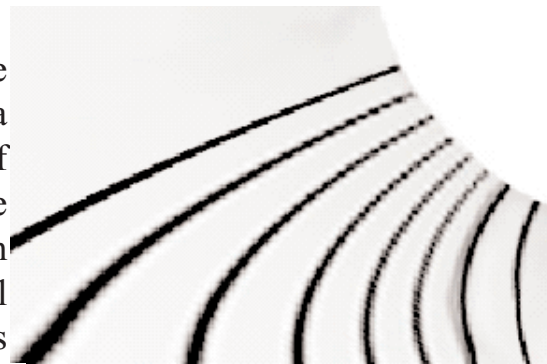
The speed of light is not a speed limit, nor is it consistent and uniform.

Supporting evidence for the belief time is a variable relies on wishful thinking and the flawed interpretation of experiments with atomic time clocks. In his paper, 'Hafele & Keating Tests; Did They Prove Anything?',¹³ A. G. Kelly, (of HDS Energy Ltd, Celbridge, Co. Kildare, Ireland) describes how Hafele and Keating avoided giving the 1971 actual test results in their paper, instead, fudging their results by dropping readings and creating their own. The fudged information presented gave the impression it was consistent with theory. Further support of the time

dilation mythos is critiqued by Bernard Burchell, in his paper ‘GPS, Relativity, and pop-Science Mythology’.¹⁴ Burchell provides a detailed explanation of why GPS /Theories of Relativity are junk sales-hype, not reality. He makes the accurate observation GPS receivers contain no atomic clocks to coordinate with. The whole advertisement is hype. A cultural myth of our own national enquirer-style creation.

The Ultra-Space Field Theory predicts variations in beta radiation (electrons) activity will occur in planes flying east and west due to the East/West Geomagnetic effect. To the best of my knowledge, the Hafele & Keating experiments did not make allowances for the East/West Geomagnetic effect, nor was their antimagnetic device ‘effective’. With regards to Einstein’s General Theory, the Ultra-Space Field Theory also predicts radioactive matter will radiate more freely with distance from a gravity core. The EM/thermal field gains density with nearness to a gravity core and inhibits radioactive behavior. Radioactive clocks are not consistent and vary with changes in the environment.

Observations of gravitational lensing (the bending of light by a gravity field) by a galactic core, or star, also support a model of EM field lensing. Thermons, supporting the electromagnetic field, condense and increase in numbers with proximity to the gravitational core, creating a lens. Einstein described this as the curvature of space and time, but the lensing effect was originally predicted in 1804, by Johann Soldner and is not a direct product of Einstein’s General Theory.



Electromagnetic waves lensing past a gravity core.

Synchrotron¹⁵ and Cerenkov radiation¹⁶ are events unsupported by, and unexplainable using, Einstein’s Special Theories. They provide evidence moving electrons pass through a medium which transports light. The sonic boom created by a plane traveling faster than the speed of sound is emitted in a cone shape. As an electron or positron accelerates to faster-than-light speeds, it displays the same behavior using EM waves. These are just some of the similarities shared by light waves and sound waves. Synchrotron and Cerenkov radiation provide hard supporting evidence light is not made up of transverse waves and that light travels through a medium. Other efforts to explain the electron’s resistance to movement include unsubstantiated claims of gravity, and the Higgs boson acting as an anchor mechanism.

Supporting hard evidence for thermons/dark matter as a transport mechanism for light includes:

- *electromagnetic waves
- *dark energy
- *pair separation (pair production)
- *pair joining (pair annihilation)
- *Synchrotron and Cerenkov radiation

Supporting conclusions from others on the concept of thermons:

- *Maxwell Planck's 'oscillators' which transport quanta
- *Paul Dirac's model of pair production

In Conclusion

The Ultra-Space Field Theory describes gravity as the electrical contraction of space. Condensing thermons/dark matter, as a weak gravity source, provide a curved medium around any gravitational source. As a support mechanism for the electromagnetic field, this condensation and curvature process effects the behavior of EM waves. Blatant prejudice, narrow minded behavior, and the threat of shunning will block any significant research from being carried out on this model of dark matter and gravity in the immediate future. Time and patience.

The model of photons has become dysfunctional with the discovery individual photons/quanta do not follow a straightline trajectory. This behavior is called 'Single Photon Interference'.

Einstein's Special and General Theories of Relativity are based on flawed assumptions regarding the aether model. Einstein assumed time (as a dimension) to be a variable with the speed of light being a constant. The Ultra-Space Field Theory assumes the speed of light to be a variable, dependent on the density of the medium transporting the EM waves, with time as a constant.

A Brief History of Dark Matter

The "missing mass" was first theorized by Jan Oort, in 1932, to account for the orbital speeds of stars in the Milky Way. Fritz Zwicky, in 1933, used the "missing mass" to explain the orbital velocities of galaxies in clusters. Other observations supported the missing mass theory, including the rotation speed of galaxies, gravitational lensing, and the distribution of hot gas in galaxies and clusters of galaxies. The amount of "missing mass", renamed dark matter in the 1970s by Vera Cooper

Rubin, is considered important by some as a factor in deciding, per the Big Bang model, whether the universe will expand into infinity- the open model, at some point stop and begin contracting into the Big Crunch- or closed model, or somehow manage to stabilize at the cusp moment before contraction, called the flat model.

In 1970, Kent Ford, the Director of the Department of Terrestrial Magnetism at the Carnegie Institute of Washington and Vera Cooper Rubin, a colleague, started to experiment with a new piece of equipment invented by Director Ford. The new device created a wide-band spectrograph capable of recording multiple EM frequencies from distant stars at twice the speed of existing models. On March 27, 1970, Rubin focused the DTM telescope on Andromeda with the intention of seeing whether that galaxy's millions of stars really moved as existing theory predicted. Wanting to accurately measure Doppler shifts with the new spectrograph, she rigged a high-power microscope to read the sharper charts it created.

Surprisingly, Rubin discovered the stars near the outer edge of Andromeda moved just as fast as the stars near the galaxy's center. According to existing theory, they should have moved slower or gone off on their own path. Two months and two hundred spectrographs later, every galaxy measured had stars moving too fast for gravity to hold them in orbit. They should have flown off into space.

Rubin concluded the universe must contain extra matter no astronomer had detected (Jan Oort's missing mass) and named it "dark matter" since it couldn't be seen or detected. She calculated the amount of dark matter needed for these effects, and how it would be distributed through the universe. According to her math, 90 percent of the universe was dark matter.

It was a full decade before the consensus opinion accepted Vera Rubin's results. Her discovery meant most of the gravity in the universe came from a source unseen and undetectable by any methods available. An invisible form of matter.

It is worth noting galactic cores, or black holes, were not 'discovered' until 1983, when Alan Dressler accidentally found a massive galactic core in the center of the Andromeda Galaxy. Prior to 1983, it was the consensus opinion every galaxy orbited around an empty center radiating infrared light. Our own galactic core (the black hole in the center of the Milky Way) is estimated to be 2000 light years wide. The acceptance of black holes at the core of a galaxy was made easier by Vera Cooper Rubin's discovery.

- [1] 'Dark Matter' wikipedia @ en.wikipedia.org/wiki/Dark_matter
- [2] 'Dark matter no-show hobbles elegant particle theory', Lisa Grossman, <http://www.newscientist.com/blogs/shortsharpscience/2012/07/dark-matter-no-show-hobbles-el.html>
- [3] 'Higgs Boson Discovery May Be 'Impostor' Claim Researchers', Michael Rundle, http://www.huffingtonpost.co.uk/2012/07/10/higgs-boson-discovery-may_n_1661047.html and 'The Higgs Boson: Reality or Mass Illusion', Keith D. Foote vixra.org/pdf/1210.0044v1.pdf
- [4] 'On a Heuristic Point of View about the Creation and Conversion of Light' translated by Wikisource, http://en.wikisource.org/wiki/A_Heuristic_Model_of_the_Creation_and_Transformation_of_Light, or 'Über einen die Erzeugung und Verwandlung des Lichtes betreffenden heuristischen Gesichtspunkt'. Albert Einstein, Annalen der Physik 1905
- [5] 'On the Law of Distribution of Energy in the Normal Spectrum', Maxwell Planck, Annalen der Physik, vol. 4, page 553, or <http://www.thebigview.com/spacetime/quantumtheory.html>
- [6] 'Quantum Interference': http://whatis.techtarget.com/definition/0,,sid9_gci815065,00.html and 'Lab 2. Single Photon Interference' www.optics.rochester.edu/.../2007_stud_rep_Lab2_Report_MalikLi_F07.pdf
- [7] 'Gravity: The Subatomic Electrical Contraction of Space and Its Relationship to Einstein's General Theory of Relativity', Keith D. Foote @ <http://vixra.org/abs/1204.0104> and 'Ultra-Space Field Theory', K. Foote, Cosmos Books, Ann Arbor, 2005. (Available at Google Books.)
- [8] 'Physics for the Modern Mind', Fuchs, Walter R., English version- MacMillan Company, 1967, pages 261-265.
- [9] 'On the Electrodynamics of Moving Bodies' (English translation) or 'Zur Elektrodynamik bewegter Körper', in Annalen der Physik. 17:891, 1905 or <http://www.fourmilab.ch/etexts/einstein/specrel/www/>
- [10] On the Relative Motion of the Earth and the Luminiferous Ether (1887), Albert Abraham Michelson and Edward Morley, Relativity. American Journal of Science, 1887, 34 (203): pages 333–345 or http://en.wikisource.org/wiki/On_the_Relative_Motion_of_the_Earth_and_the_Luminiferous_Ether
- [11] 'The Foundation of the General Theory of Relativity' (Die Grundlage der allgemeinen Relativitätstheorie) Albert Einstein, Annalen der Physik, 1916 or http://www.alberteinstein.info/gallery/pdf/CP6Doc30_English_pp146-200.pdf
- [12] 'The Physical Foundations of General Relativity', Sciama, D.W., Doubleday & Co., 1969, pages 44-53

[13] 'Hafele & Keating Tests; Did They Prove Anything?', A. G. Kelly, (of HDS Energy Ltd, Celbridge, Co. Kildare, Ireland), <http://www.cartesio-episteme.net/H%26KPaper.htm>

[14] 'GPS, Relativity, and pop-Science Mythology', Bernard Burchell, www.alternativephysics.org/book/GPSmythology.htm

[15] 'Synchrotron Radiation' @ hyperphysics.phy-astr.gsu.edu/hbase/particles/synchrotron.html

[16] 'Cerenkov Radiation' @ www.britannica.com/EBchecked/topic/109373/Cherenkov-radiation

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