

Gravitation's Origin and Impetus

Kenneth Gonder

kgonder0@gmail.com

5/12/23

(Gonder, viXra, Gravitation's Origin and Impetus O1A 2a.pdf)

Abstract

The question of gravity is effortlessly resolved by adopting the practical, self-evident understanding that subatomic particles naturally condense out of the all-pervasive field of radiant electromagnetic energy that comprises the universe. This produces a commensurate decrease in the universal field's density immediately around emerging particles that diffuses inward exponentially because of a sphere's innate geometry. This is what establishes a particle's and the bodies they compose gravity field. Runaway coalescing naturally ensues as they mechanically pursue equilibrium in the ever-decreasing density of their ever-merging gravity fields.

Discussion

Something is never created from nothing. Particles don't just pop into existence out of nowhere. They condense into being out of the radiant electromagnetic energy that is the universe that expresses as an infinitely vast, all-pervasive universal field.

The universal field is everywhere. It extends indefinitely. If it could be separated from matter, it could be said to correspond to all space. It's continuous. Its continuity is unbreakable. And it can't be interrupted. But just as it is with any field, its intensity, which is the same as density, can and does vary. None of this is the least bit controversial.

Few would also disagree that there's no such thing as matter per se. Particles aren't composed of any actual material. Nor do they have a surface.

They're just small condensed spherical fields of radiant energy of increasing density that reach some maximum concentration at their center. So there's no separation between a "particle" (or the objects they comprise) and the field they originate from and now reside.

In his book, *Relativity: The Special and the General Theory*, Einstein suggests: "Physical objects are not *in space*, but these objects are *spatially extended*."¹ In an analogous way, some might conclude he's correct. But a more accurate interpretation would be that all objects are *electromagnetically extended*.

Because they're one and the same, every time a particle "spontaneously" congeals into existence the entire universal field is put at further loss. Its density decreases commensurate with the emerging particle's condensing. But that minuscule thinning isn't spread evenly throughout the entire universe. Nearly all of it occurs in the vicinity of the particle. What's not taken up and drawn into the particle is left diffusing inward immediately around it, dissipating exponentially toward its center, spherically, while the field's outward condensing continues infinitesimally.

Despite the field's inward diffusion, it still has to dissipate exponentially per the inverse square law just like any dispersion because of a sphere's inherent three-dimensional geometry. Whether the diffusion dissipates inward or outward doesn't matter. It's still bound to the exponential gradient intrinsic to spherical geometry.²

It's the inward diffusion of the universal field's ambient electromagnetic energy that's not been drawn into the particle but remains outside it that defines its gravity field. It's the innate compounding of those gravity fields that causes their density to always be at their least directly in between the bodies they

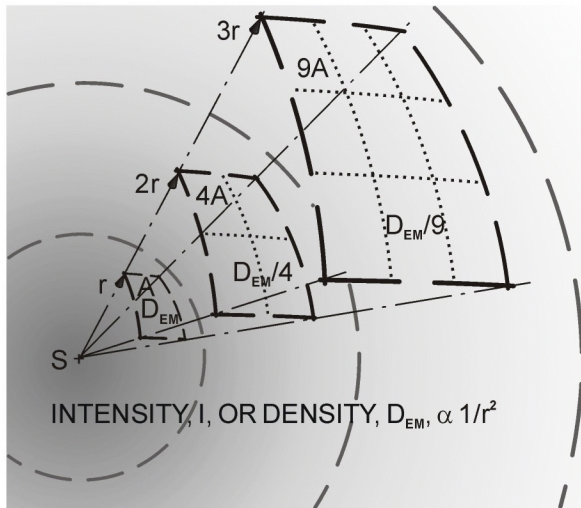
1. Albert Einstein, *Relativity: The Special and the General Theory*, 15th ed. Trans. Robert W. Lawson (New York: Three Rivers Press, 1961), vii.

2. "Inverse Square Law," Hyperphysics, last access Dec 28, 2022, <http://hyperphysics.phy-astr.gsu.edu/hbase/Forces/isq.html>.

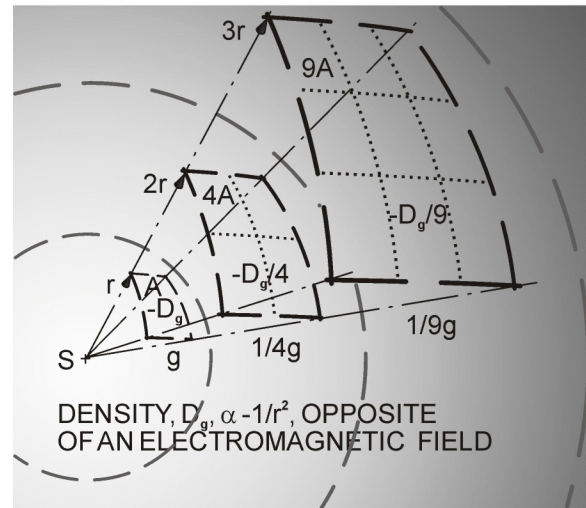
surround at their common center of mass, their center of gravity, regardless of the distance or extreme the conditions.

Naturally compelled to seek equilibrium in the varying density of their ever-combining gravity fields, all bodies from particles to galaxies are constantly pushed mechanically by the highest density toward the lowest. This causes their unrelenting gravitation toward one another. Runaway coalescing naturally follows until enough material accumulates that the resultant pressure from their ever-merging fields triggers fusion reactions that ultimately transmute every particle back into the electromagnetic radiation from which it arose.

At the scale of galaxies, gravitation's runaway nature causes an ever-increasing infall of ever-coalescing material that ceaselessly migrates inward toward a galaxy's common center of mass. As material nears its core, its exponential condensing collapses it back into the radiant/plasma energy it originated from and radiates it back out. Or in well-developed spirals, it's spewed out in huge, bipolar jets. Eventually it slows, cools, and reconstitutes back into ordinary matter. It can then begin gravitating back to its or another nearby galaxy in a never-ending process of perpetual recycling. (See **Figure 1**, Inverse Square Law, Field; **Figure 2**, Fields; **Figure 3**, Gravitation; **Figure 4.1**, **4.2**, **4.3**, **4.4**, The Shape of Gravitating Bodies - 1, 2, 3, 4; **Figure 5.1**, Atoms, **Figure 5.2**; Neutrons & Isotopes; **Figure 5.3**, Ions, beginning on the next page. Click "**Figure**" to return)



1. ELECTROMAGNETIC FIELD
 ELECTROMAGNETIC FIELD INTENSITY, WHICH IS DENSITY, DECREASES PROPORTIONAL TO THE INVERSE OF THE SQUARE OF THE RADIUS. THIS DIFFUSES ITS OUTWARD ACTING PRESSURE GRADIENT EXPONENTIALLY.



2. GRAVITY FIELD
 GRAVITY FIELD INTENSITY, OR DENSITY, ALSO DECREASES PROPORTIONAL TO THE INVERSE OF THE RADIUS SQUARED. BUT ITS DIFFUSION IS INWARD. THIS INCREASES ITS OPPOSITE, NEGATIVE PRESSURE GRADIENT EXPONENTIALLY PER GRAVITY'S FORCE, g.

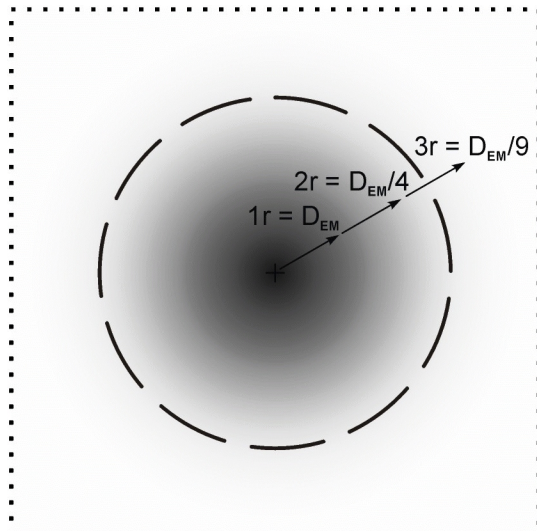
INVERSE SQUARE LAW, FIELD

An electromagnetic (EM) field, depicted in section view by the diffusing background in diagram 1, is subject to the inverse square law that's the product of the three-dimensional geometry of a sphere. So the field's intensity, which is the same as density that produces pressure which is force, twice the distance from its source is diluted by four times the area. This reduces its density to 1/4 the original. At three times the distance, it's spread over nine times the area, which reduces the density to 1/9 the original, and so on where D_{EM} (the density at a given radius) = S (the original density) / $4\pi r^2$ (the area of a sphere).

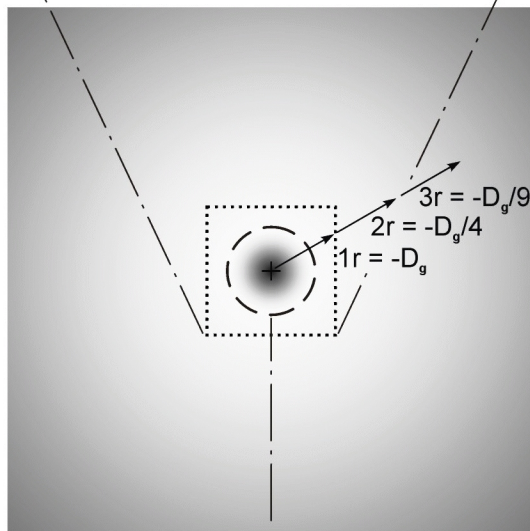
The tangible, radiant, EM energy of the universal field that particles condense out of is all-pervasive, continuous, inseparable, and it varies in density. So the remaining ambient radiation that's not been drawn into a congealed particle has to thin inward, diffusing exponentially toward its center. This is what constitutes their, or collectively the bodies they compose, gravity field, portrayed in section view as the diffusing background in diagram 2.

It's the opposite of an EM field. Its lowest density is reciprocal to the EM field's highest. Still bound to a sphere's inverse square law, its density, which is still intensity, which still equates to pressure and force, still has to dissipate exponentially. The gradient remains the same. It just expresses the opposite direction, diffusing inward instead of outward where D_g (the density at a given radius) = $-S$ (the original point source strength or negative density established by a body's mass) / $4\pi r^2$ (the area of a sphere).

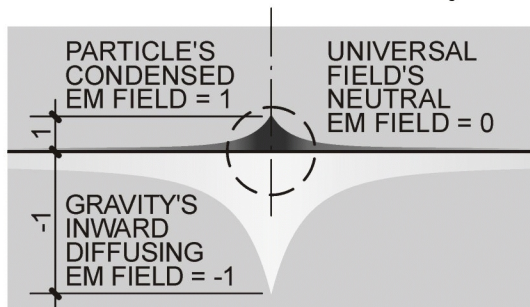
So at twice the distance from the center, its original negative density is diffused over four times the area, which is 1/4 the original that reduces the inward acting pressure by the same amount, decreasing gravity's force to 1/4g. At three times the distance, its negative density is spread over nine times the area, which is 1/9 as dense as its original that decreases the inward acting pressure the same, reducing gravity to 1/9g, and so on.



1. ELECTROMAGNETIC FIELD
 POSITIVE DENSITY DIMINISHES, $D_{EM} \propto 1/r^2$



2. GRAVITY FIELD
 NEGATIVE DENSITY DIMINISHES, $D_g \propto -1/r^2$



3. RELATIVE FIELD DENSITY & SIZE
 A PARTICLE'S CONDENSING NATURALLY PRODUCES RECIPROCAL DIFFUSION, AN EQUAL BUT OPPOSITE GRAVITY FIELD. THEIR SIZE AFFECTS THEIR RELATIVE DENSITY, WHICH IS THE CAUSE OF THEIR APPARENT DIFFERENCE IN STRENGTH.

(27 Fields 10a)

FIELDS

The all-pervasive radiant energy of the universe fundamentally manifests in two ways, as an electromagnetic (EM) field and a gravity field. They are the same universal field but with opposite expressions. They coexist, and they coincide. But they're reciprocal. And one does not exist without the other.

They're portrayed in section view by the diffusing background in diagram 1 & 2. The EM field is shown in an expanded view. Its size is usually many magnitudes smaller than gravity's. The dashed circle represents the extent of any theoretical body.

When the universal field "spontaneously" condenses into a subatomic particle, it's defined as matter with mass. But at its essence, it remains an EM field. It could be qualified as having a positive density. The ambient radiation that's left behind that doesn't congeal into the particle becomes its gravity field. It could be qualified as the opposite of matter with negative mass that has a negative density.

The amount of radiation that composes the particle is the same that's drawn from the universal field. They're one and the same, and their continuity is impossible to disrupt.

If we were to assign the universal field the neutral value of zero and we gave the particle, condensed EM field with positive density, a value of one, its resultant inward diffusing EM field, its gravity field, would have a corresponding negative quantity the equal and opposite value, negative one. They naturally reciprocate despite their apparent difference in size, diagram 3.

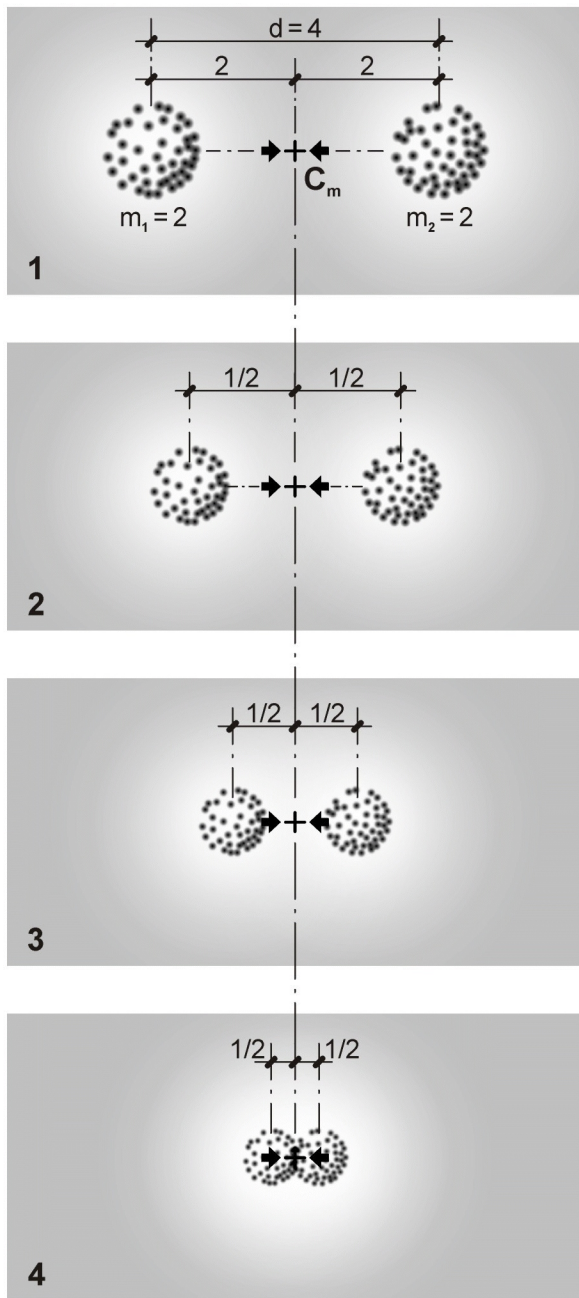
EM fields diffuse radially outward exponentially per a sphere's inverse square law (Intensity or Density $\propto 1/r^2$). Gravity fields also diffuse radially exponentially but inward toward a particle's center.

It makes no difference whether the diffusion dissipates inward or outward. The gradient still has to diminish exponentially. Both are subject to the same inherent geometry of a sphere.

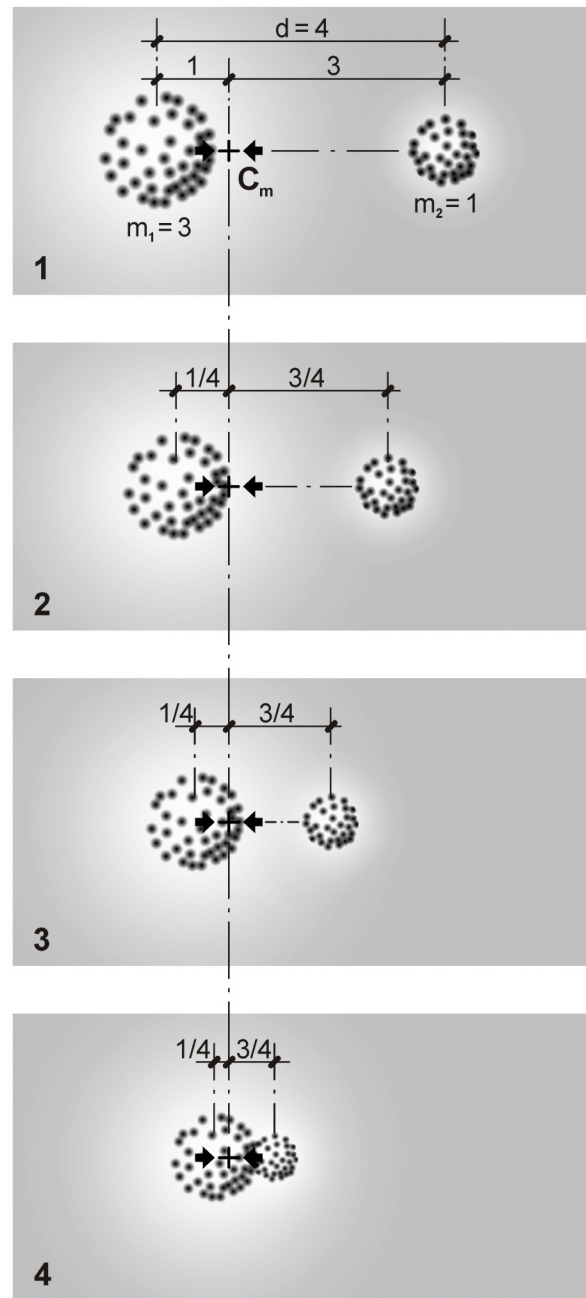
An EM field's exponential diffusion that dissipates from higher inner density to lower outer density creates outward acting pressure. It repulses outward radially. This would be correctly qualified as a positive charge, having a male or originative connotation.

A gravity field's exponential diffusion that dissipates from higher outer density to lower inner density creates inward acting pressure. It repulses inward radially, which would be correctly qualified as a negative charge with a female or executive connotation. The greatest pressure of each occurs simultaneously at their coinciding centers.

Figure 2



**1. EQUAL MASS
GRAVITATION**



2. UNEQUAL MASS

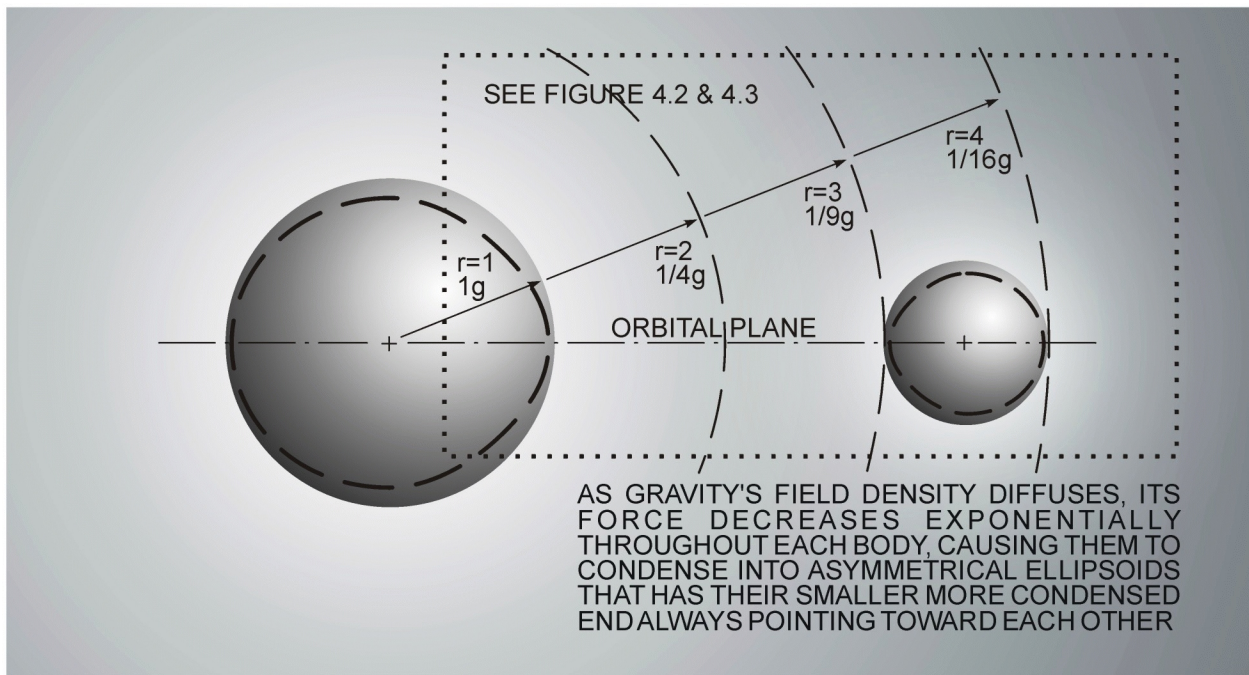
Bodies don't attract. They're pushed together. Mechanically driven to seek equilibrium in the ever-decreasing density of their ever-combining gravity fields, depicted in section view by the diffused background, they're constantly pressed by higher density toward the lowest located at their common center of mass, C_m . This inexorably leads to runaway coalescing.

Gravity fields not only surround but they also permeate all bodies, including atoms. So their compounding causes both coalescing and condensing at all scales consistent with Newton's law of gravitation ($F = G(m_1 m_2) / d^2$, where F is the "attractive" force, G is the gravitational constant, m the mass, and d is the distance between their centers).

The distance to their common center of mass ($d_{cm} = m_1 d_1 + m_2 d_2 / m_1 + m_2$), their relative condensing, and their relative of motion toward each other all remain proportional to their masses as they relentlessly gravitate in the ever-thinning density of their ever-compounding gravity fields, conceptually portrayed in sequence 1-4 in both diagrams.

(28 Gravitation 10a)

Figure 3



GRAVITY'S CONDENSING

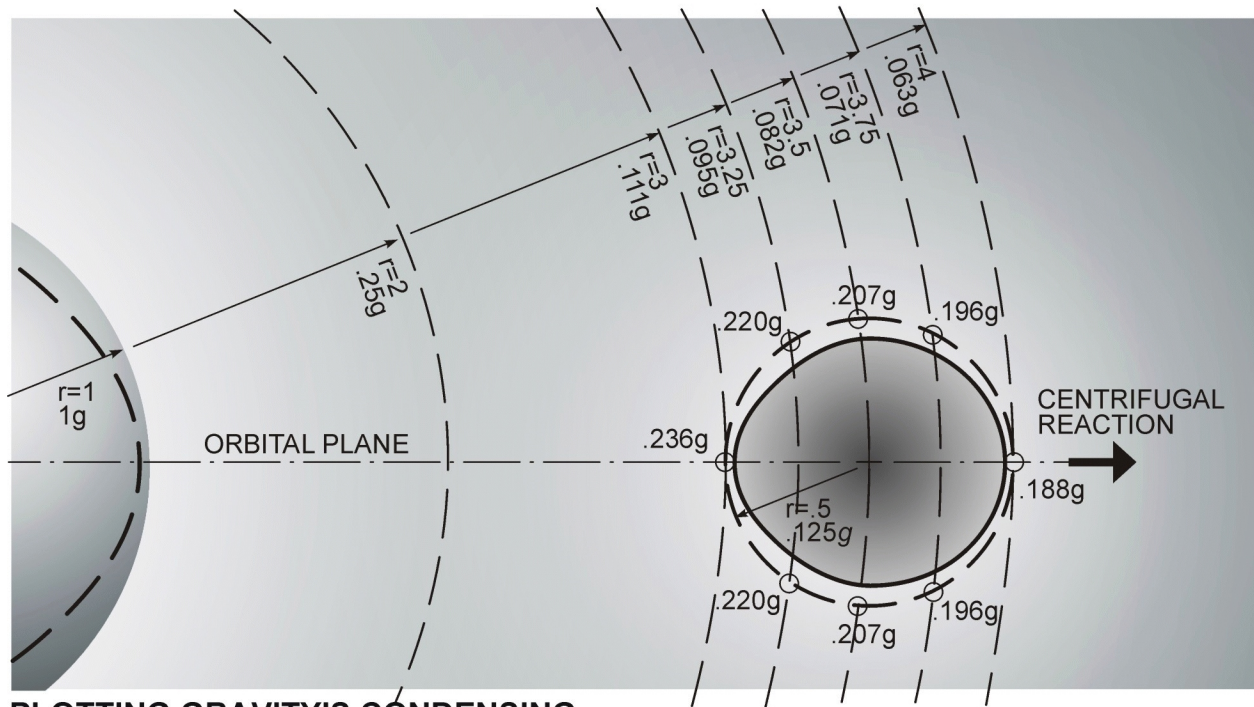
THE SHAPE OF GRAVITATING BODIES - 1

Gravitating bodies don't stretch in gravity fields. They continue to condense, contracting spherically in an omnidirectional manner into ellipsoidal shapes that are slightly asymmetrical similar to an egg, depicted by the dashed ovals. This is due to the exponential decrease in density of their compounded gravity fields throughout the other body, portrayed in section view by the diffusing background.

For simplicity, if we were to set the smaller body's diameter equal to the larger's radius and locate it three radiuses out then the larger's force of gravity, defined as $1g$ at its surface, would radially affect the smaller sweeping across its entire body, exponentially decreasing from $1/9g$ at its closest point to $1/16g$ at its farthest, causing the closest end to condense more. The smaller's gravity field would affect the larger in the same way but much less. This creates a slight asymmetry in their condensing that has the more condensed ends always pointing toward one another, or more precisely toward a common center of mass for any number of objects.

If the smaller body's orbit was decaying but with a slow orbital or rotation rate or none at all, the asymmetry of its deformation would remain the same while continuing to condense until they merged. For faster orbits and/or rotation where a stronger outward centrifugal force began to exceed gravity's inward condensing, the smaller body would begin to fragment and disperse. But that dispersion would begin first from its outermost point where the centrifugal force would be the greatest and gravity's compounded force would be at its weakest. We often see this with the fanned dust tails of comets that always diffuse to the outside of their elliptical orbits opposite the Sun.

An obvious example of a body's asymmetrical ellipsoidal deformation is the Moon's, and to a lesser degree the Sun's, affect on the Earth's oceans. Water's pliability causes it to more readily distort than the rocky crust below, making its deformation much easier to perceive. Tides are simultaneously high both facing and opposite the Moon where they're slightly lower. This is not the result of the "pull" of the Moon's gravity. And even if it was, there's nothing on the opposite side pulling those oceans into their high tide. They're often explained as the result of no pull, or sometimes more reasonably but still incorrectly, the result of the centrifugal force of the Earth-Moon system.



PLOTTING GRAVITY'S CONDENSING

THE SHAPE OF GRAVITATING BODIES - 2

Compounding gravity fields diffuse exponentially through gravitating bodies, causing their continued condensing into asymmetrical ellipsoids. This can be demonstrated numerically by plotting hypothetical values for their combined gravity around their surface.

First, we need to establish the relative gravity of the bodies by comparing their volumes. Assuming they're both the same composition, if we set the larger's radius at 1 (the unit of measure doesn't matter), then its volume ($V = 4/3\pi r^3$) will be 4.19 ($V = 4/3\pi 1^3$). For the smaller, shown in section view, whose radius is half of the larger's, its volume is .524 ($V = 4/3\pi .5^3$). So the smaller body's volume will be about one eighth, .125 ($.524/4.19$), of the larger's. That's the ratio we'll use for their relative gravity, the larger 1g, the smaller .125g.

So at 3 radiuses out where the bodies are closest, the larger's gravity ($1/r^2$) will be .111g ($1/3^2$ or $1/9g$). Because gravity fields compound, we'll add that to the smaller's gravity at its surface, which will always be the same .125g. So the total gravity at their closest point is .236g ($.111g + .125g$).

At 3.25 radiuses out, the larger's gravity decreases to .095g ($1/3.25^2$ or $1/10.56g$). At each radius distance, it will be the same value everywhere, spherically, perpendicular to its radiant and everywhere through the smaller body internally where that sphere slices through it two-dimensionally. The smaller's total gravity is still .125g at its surface where we're charting gravity's effect. So we'll add that .125g to the larger's .095g to get a total of .220g that will apply everywhere around the smaller's exterior at the 3.25 radius distance.

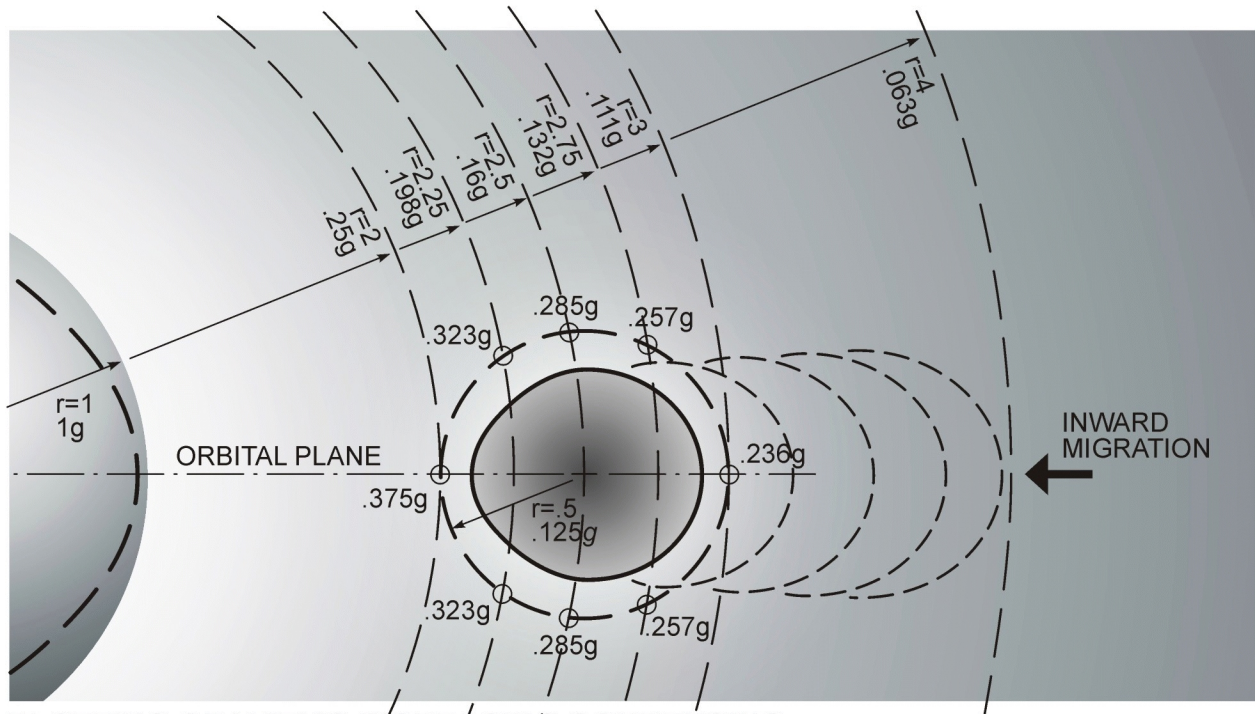
At 3.5 radiuses, the larger's gravity diffuses to .082g ($1/12.25g$). Added to the smaller's .125g, we get .207g at about its midpoint all the way around its exterior. At 3.75 radiuses, it's weakened to .071g ($1/14.06g$). We'll add that to the smaller's .125g to get a total of .196g at about its three-quarter point all the way around.

At 4 radiuses, the smaller's farthest end, the larger's gravity has diminished to .063g ($1/16g$). So the total is .188g ($.063g + .125g$). Note the difference from its closest end, .236g. The overall gravity is much higher. This is why bodies with faster rotation and/or orbital velocities where the centrifugal's outward dispersal is higher than gravity's inward condensing always begin to fragment from their outermost point first.

This simple numerical approximation of gravity's compounding conceptually shows how its exponential diffusing throughout gravitating bodies distorts them into asymmetrical ellipsoids that continue to condense but begin to lose material from their backside first when subject to high enough centrifugal forces.

(11.2 Shape GRF 9a)

Figure 4.2

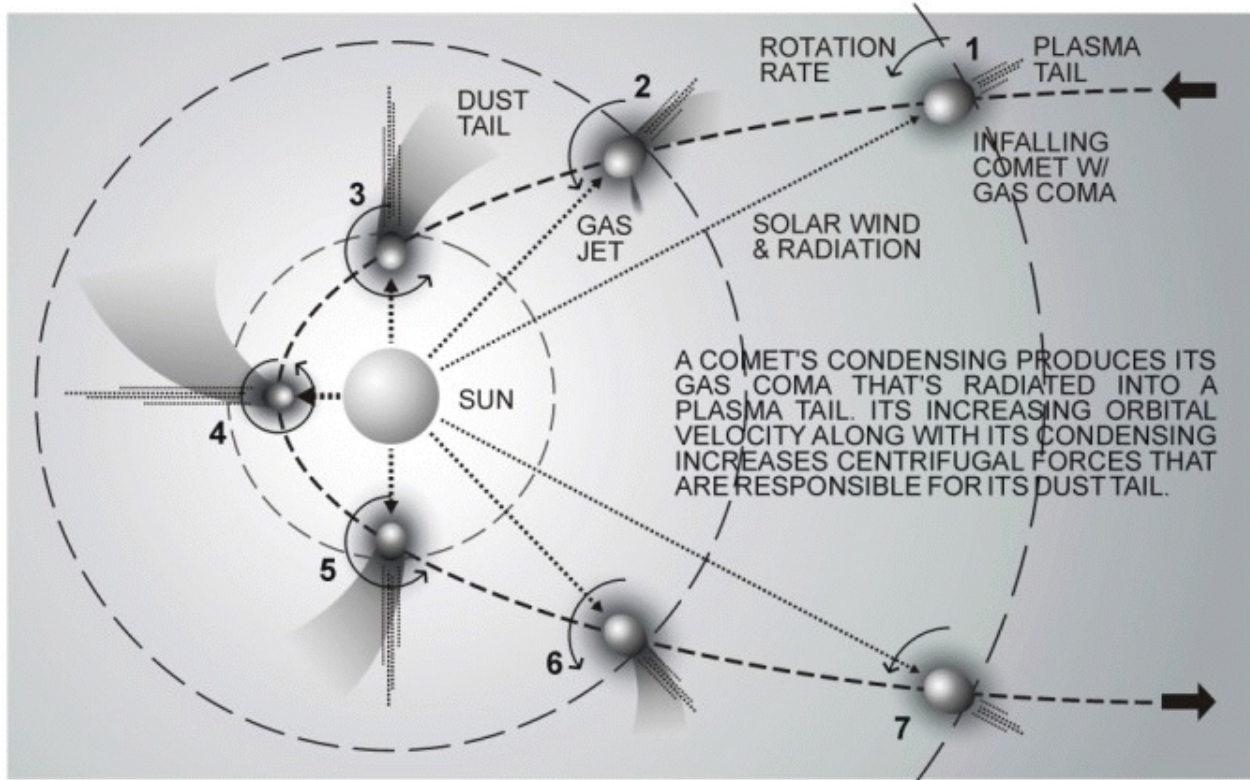


PLOTTING GRAVITY'S INCREASING CONDENSING

THE SHAPE OF GRAVITATING BODIES - 3

The continued condensing of gravitating bodies can be clearly demonstrated. If we approximate gravity's force at the closer distance of 2 radiuses the same way we did at the 3 radius distance and compare the results, we can quickly see the effect of the compounding of gravity's diffusing fields: more asymmetrical ellipsoidal condensing with increasing distortion. No stretching. No spaghettifying.

With gravitation's inherent runaway coalescing, their condensing continues unabated until a centrifugal force disperses the smaller, its diffusion beginning from its backside, or their eventual merging creates enough inward pressure from their combined fields to trigger fusion reactions that convert them back into the radiant energy they originated from in a perpetual never-ending cycle of reprocessing.



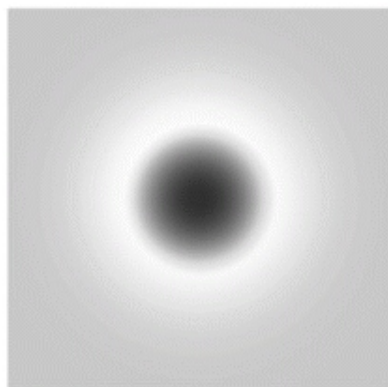
GRAVITY'S EFFECT ON COMETS

THE SHAPE OF GRAVITATING BODIES - 4

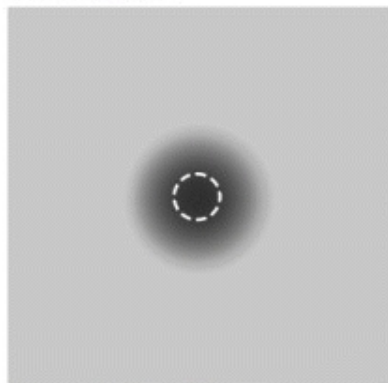
1. A comet that was theoretically uniform and pliable would assume the shape of an asymmetrical ellipsoid oriented with its smaller more pointed end always facing the Sun due to the compounding of its and the Sun's gravity field, portrayed in section view as the diffusing background. Its ongoing condensing in the exponentially decreasing density of the Sun's gravity field at first gently squeezes out its gas, mostly hydrogen, to form its coma, that may or may not have been evaporated/sublimated from internal material by the intensifying pressure and heat from its increasing compression. The Sun's radiant energy then begins to ionize the gas and blow it straight back to form the comet's plasma tail.
2. As its condensing continues, the gas is sometimes seen jetting out at high velocities, confirming its internal origin that's more likely caused by pressure originating from its increasing condensing than external heat from increasing sunlight.
3. The comet's increasing condensing also increases its rate of rotation, indicated by the increasing length of the radiused arrows. When its outward acting rotational and orbital centrifugal forces begin to exceed gravity's inward acting condensing, its material begins to dislodge, fall away, and disperse into an arcing fan shape to form its dust tail. This always occurs from the comet's backside opposite the Sun where the combined centrifugal forces are the strongest and gravity's condensing is the weakest.
4. The comet's coma along with its plasma and dust tails continue to increase until it reaches its closest point to the Sun, perihelion, where its condensing and centrifugal forces and the Sun's radiant energy are all at their maximum.
5. As it begins to leave the Sun's vicinity, the now increasing density of the Sun's gravity field begins to reverse the comet's condensing that in turn slows its rate of rotation. Together with its slowing orbital velocity, its rotational and orbital centrifugal forces weaken, curbing its loss of material, which reduces the size of its dust tail.
6. As it continues to move farther away, solar wind and radiation also diminish, reducing the size of its plasma tail as well.
7. The comet's condensing continues to ease all the way to its aphelion, its farthest point from the Sun, where the pressure from its compression that produces the outgassing that forms its coma is at its weakest.

(11.4 Shape 9a)

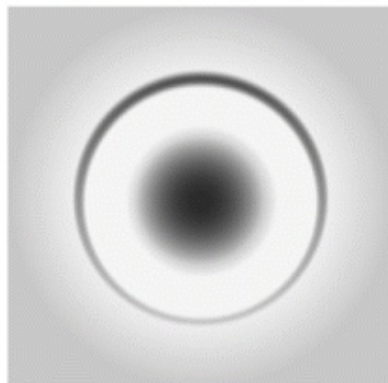
Figure 4.4



1. PROTON



2. ELECTRON



3. HYDROGEN ATOM

ATOMS

Protons should not be considered tiny physical particles within an electromagnetic field but as the field itself. There's no surface where the field stops and matter begins. The field becomes progressively more dense until it peaks at its center, represented in section view by the darker diffused circle in **1** & **3**. But because that proton field has condensed out of the universal field of electromagnetic radiation, the ambient radiation not drawn into the proton has to decrease in density around it diffusing exponentially like any field because of the geometry of a sphere.

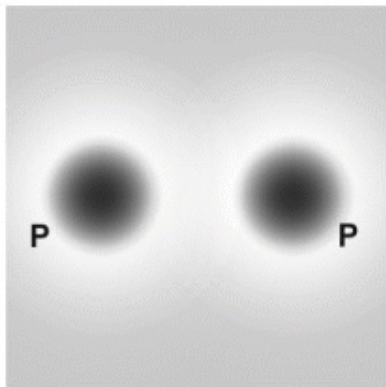
But its diffusion disperses inward not outward, which defines its gravity field, depicted in section by the diffusing background in **1** & **3**. Because the decreasing density of a proton's gravity field is larger than the increasing density of its electromagnetic field, the gravity field's compounding with the fields of other particles tends to push them together as they naturally pursue equilibrium, mechanically seeking the lowest density that always lies directly between them. So protons should actually be considered negatively charged.

Convention has protons positive charged and electrons negative. Apparently, this has been mostly an arbitrary designation. But it doesn't correspond to physical reality. It's one of the reasons why gravitation and electromagnetism are not recognized as the same effect.

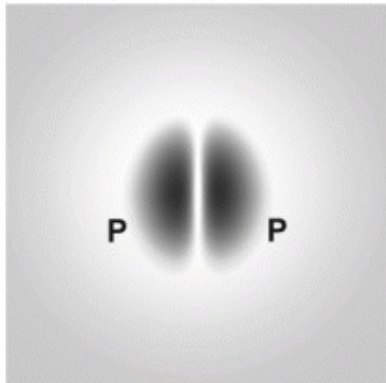
Electrons should also be considered as having condensed out of the universal field. Its charge is considered equal to that of a proton. But its mass is 1/1837th as much. So it yields a much smaller gravity field, indicated by the small white dashed circle. For graphic clarity, it's shown proportionally much larger than it would actually be. Being that the decreasing density of its gravity field is smaller than the increasing density of its electromagnetic field, it has a repulsive effect that when compounded with the fields of other electrons tends to push them away. So in reality it's positively charged. With the electromagnetic field of the electron still smaller than the gravity field of the proton, the compounding of their fields still pushes them toward one another.

An atom's electrons should not be envisioned as small objects that rapidly orbit the nucleus as always portrayed. They're more accurately conceived as having been pressed down and smeared out all over and around the entire nucleus, spherically, three-dimensionally, by the decreasing density of the universal field enveloping it, the atom's gravity field. It's compressed to a level where the repulsive effects of all the fields balance out and find equilibrium, as is implied in the section view through a hydrogen atom that has only one electron and one proton.

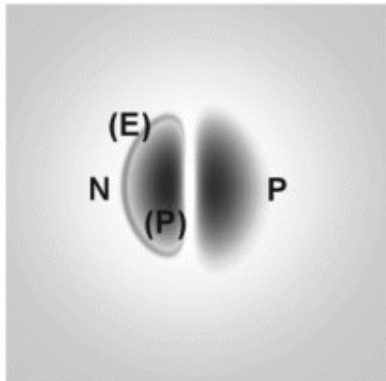
You still have to ask, though, what is it that initiates the particle's condensing out of the universal field.



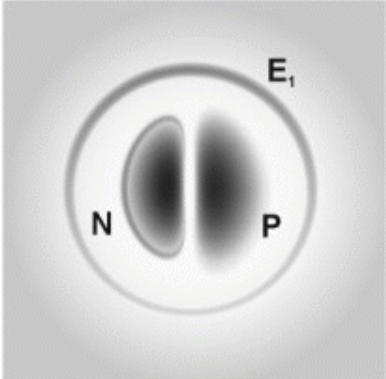
1. TWO PROTONS



2. PAIRED PROTONS



3. NEUTRON & PROTON



4. HYDROGEN ISOTOPE

(18.2 Atom 7a)

NEUTRONS & ISOTOPES

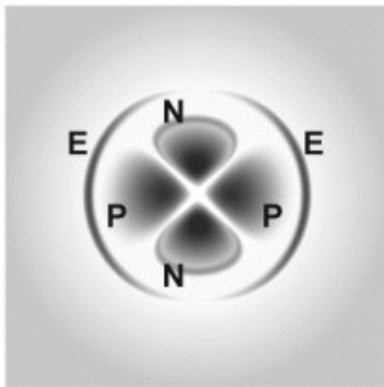
A neutron can be considered a merging of a proton and an electron. The compounding of their two electromagnetic fields and their two gravity fields are theoretically balanced to yield no charge, that is if it could stand alone. Its neutral charge suggests that the electromagnetic fields of protons and electrons are half as strong as their combined gravitational fields.

For numerical convenience, if we assume the strength of a proton's gravity field is (-1), negative because of the field's decreasing density, and we know that an electron's is 1/1837th of that (-.00054) then their electromagnetic fields would have to be half of $(-1) + (-.00054)$ or $(+.50027)$, positive because of its increasing density. So a proton's relative charge would be its gravity field (-1) plus its electromagnetic field $(+.50027)$ or $(-.49973)$. And an electron's relative charge would be its gravity field $(-.00054)$ plus its electromagnetic field $(+.50027)$ or $(+.49973)$.

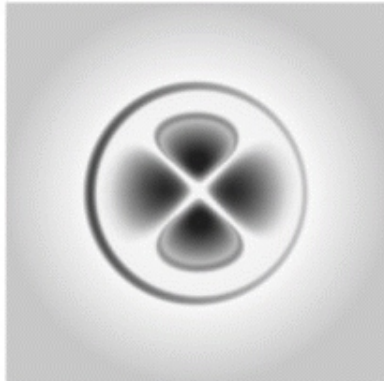
Neutrons usually only exist, though, through the initial pairing of two protons, located at **P**. The compounding of the decreasing density of their fields, $(-.49973) + (-.49973)$ or $(-.99946)$, first draws them together mechanically as they naturally seek equilibrium. Then the even higher decrease in density of their combined fields draws in and tightly holds an electron, which is positively charged $(+.49973)$, located at **E**, to create, or define, a neutron, located at **N**. It's likely that the electron may move back and forth between protons or at times envelop both at once. But the three together still have a negative charge, or a field of decreasing density of $(-.49973)$, that can draw in another electron $(+.49973)$, located at **E₁**, to achieve a balanced state, in this case deuterium an isotope of hydrogen.

The actual distance to the electron would be over 60,000 times the radius of the nucleus. At the scale depicted that would put it more than 100yds away. The important principle that's trying to be conveyed here is that it's the sequence in which the particles assemble, which is facilitated by the relative densities or actual charge of their fields, that is responsible for the creation of a neutron. Otherwise, you'd just end up with a hydrogen atom.

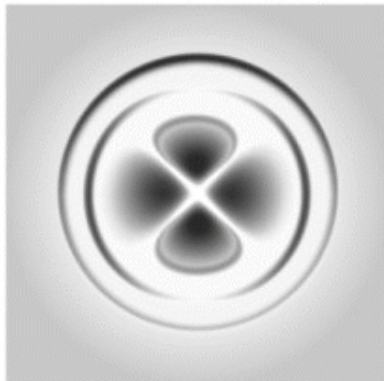
Figure 5.2



1. HELIUM ATOM



2. NEGATIVE ION (-E)



3. POSITIVE ION (+E)

IONS

The actual charge of an ion is also opposite of convention. If we begin with a ground state helium atom, shown theoretically in a section view through its center, the electromagnetic and gravity fields of its two protons, located at **P**, and two electrons, at **E**, balance to neutralize its charge. Its neutrons, at **N**, already a combination of an electron and proton, remain neutral.

If one of the electrons is removed, as depicted in section view in **2**, the density of its combined fields would be decreased where its relative charge, as calculated in the previous diagram, would be $(-.49973)$, where its gravity fields dominate, which would tend to draw in other particles, making its charge negative.

If an electron were added, as represented in section view in **3**, the density of its combined fields would be increased. Its relative charge would be $(+.49973)$, where its electromagnetic fields dominate, which would tend to push away other particles, making its charge positive.

A decreasing density in the universal field, a gravity field, is a negative charge that tends to push inward. The increasing field density of a particle's electromagnetic field is a positive charge that tends to push outward. It's the inherent repulsive nature of a particle's, or any object's, electromagnetic field that mechanically causes them to seek equilibrium in the universal field that innately decreases in density around every particle, or object. Their reactive search for the lowest density in their combined fields that always lies directly them, or toward a common center of mass for multiple objects, causes them to move toward one another in an apparent attraction. It's the same repulsive effect of their interacting fields that pushes or holds them apart when they attain equilibrium.

Protons and neutrons and electrons are not bound together or repelled by imaginary strong and weak nuclear forces that are magically transmitted by unseen massless particles. Gravitation resulting from electromagnetism is simply governing all their interactions.

Conclusion

The problem of unification naturally resolves itself by recognizing that subatomic particles innately spawn from and congeal out of the radiant electromagnetic energy that is the universe. The universal field's uninterrupted continuity creates a commensurate deficit in its density immediately around emerging particles and their coalesced bodies that has to diffuse inward exponentially because of a sphere's inherent geometry. This is what constitutes a gravity field.

The ever-decreasing density that arises from their natural compounding creates runaway coalescing/condensing that has the highest density constantly pushing bodies together toward the lowest density that's always located directly in between them at their common center of mass. From this sensible, well-grounded realization all else falls neatly into place.

Coda

If you believe the fundamental constituent of the universe is radiant electromagnetic energy, that it's continuous and uninterrupted, and that subatomic particles condense out of it then you'll have a difficult time denying this elemental unifying conclusion.

The reason gravitation has been so elusive begins with our incorrect assumption about space. It's not something. By definition, it's the nothingness between objects. So there's nothing there to curve (or to expand, or stretch, or cause light's redshift from stretching). We then try to meld that nonexistent space with a nonexistent time into an inconceivable four-dimensional "spacetime."

Time also does not exist. It's a convention we establish by selecting objects with periodic motion, like the Earth's rotation and orbit or the natural frequency of cesium atoms of atomic clocks, that we use as reference. It's not an inherent property of the universe.

Then we try to make that purely theoretical four-dimensional abstraction curve two-dimensionally as a nonexistent plane. A plane by definition doesn't exist either. Its two-dimensionality can only define a location that's planar. Curvature is a property limited to one or two dimensions. In three dimensions, any change in a substance can only occur as a variation in its density. Conceptually, it cannot curve.

We then have that two-dimensional, nonexistent, curving plane of four-dimensional, nonexistent, inconceivable spacetime somehow dent underneath three-dimensional massive bodies as if affected by the pull of the gravity of a much more massive body positioned underneath them. The denting then somehow induces their attraction by somehow causing them to roll downhill toward one another, despite not actually rolling or being uphill. If this were actually possible, it'd be a mechanical reaction that acts instantaneously.

All of this conflicted nonsense is at odds with more unfeasible dogma that has gravity propagated by a force similar to electromagnetism that somehow pulls bodies together, acting at the speed of light via waves. But at the same time, that attraction is also somehow mitigated by unobservable massless graviton particles that somehow exist physically without mass. Which if they actually were particles, wouldn't be able to act at the speed of light either. They'd relativistically become infinite.

None of this entrenched orthodoxy that's aggressively perpetuated through groupthink and indoctrination has any chance of ever actually working in our real nontheoretical universe of three actual dimensions.

Bibliography

Arp, Halton. *Seeing Red: Redshifts, Cosmology & Academic Science*. Montreal: Aperiron, 1998.

Einstein, Albert. *The Meaning of Relativity*. 5th ed. Translated by Edwin Plimpton Adams, Ernst G. Straus, Sonja Bargmann. Princeton: Princeton University Press, 1953.

Einstein, Albert. *Relativity: The Special and the General Theory*. 15th ed. Translated by Robert W. Lawson. NY: Three Rivers Press, 1961.

General Reference. Hyperphysics, last access 2022, <http://hyperphysics.phy-astr.gsu.edu/hbase/hframe.html>.

General Reference. Merriam-Webster, last access 2023, <https://www.merriam-webster.com>.

General Reference. *Science News*, 1999 - 2018.

General Reference. *Scientific American*, 1994 - 2023.

General Reference. *Sky & Telescope*, 2000 - 2023.

General Reference. Wikipedia, last access 2023, <https://www.wikipedia.org>.

Gonder, Kenneth. *The Reality of Relativity*. Last revision 2023, 7.4 230320. Amazon/B&N, Independently published (LCCN: 2020901711), 2018.

Declarations

The author certifies that he did not receive any funding, grants, or any type of support from any individual or organization in the connection with the study or preparation of this work. The author further certifies that he does not have any financial or competing interests in connection with this work or ties of any kind to any individual or organization that might.