What are the parameters that are altered to define the changes in properties of empty space? What has changed within a space to make it a gravitational, electric or magnetic field?

We know that space allows the propagation of electromagnetic waves that can travel through it at a finite speed, the speed of light. Can this speed be used as a variable? Can fields be explained by how the speeds of light are configured in a space?

Let's set aside relativity theory and go back to a Lorenz-Aether model (LET). There is no ability to measure the one-way speed of light but we know that it occurs because stationary observers see the changing relationship with the two-way speeds of light obviously developing when objects are accelerated.

Note, it takes a force to change a speed relationship with the two-way speeds of light. So do changes to the two-way speeds of light have anything to do with forces?

I plan to show a unification of the fields using LET as our model. Along any linear segment of space, the speeds of light travel in two opposing directions. Let's designate them as the directional speed of light, left or right. We will assume that we are stationed in a preferred reference frame and have the ability to see the changes in light speed within each directional space.

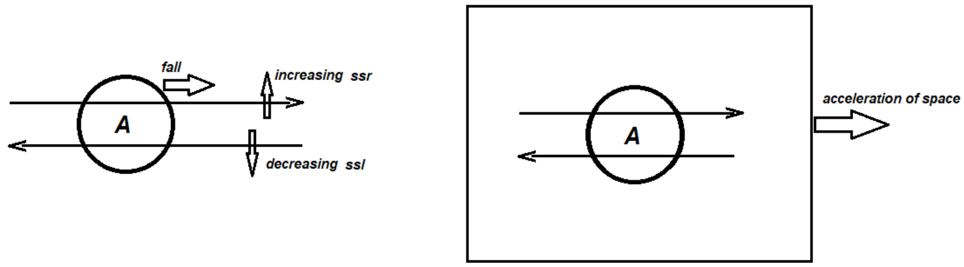
2 types of acceleration

Acceleration through space – When we observe a spaceship under the influence of a mechanical force causing acceleration, we view the ship to be undergoing internal stresses (compression or tension) while changes in its speed relationships with the two-way speeds of light in line with its motion are occurring.

In relation to the rocket, the forward speed of light is decreasing its relative speed while the incoming light speed is increasing. The absolute value of increase equals the absolute value of decrease. If light speed increases to ***c-v*** in the forward direction, it decreases to ***c+v*** in the opposing direction. Let's call this a balanced change to the speeds of light.

An accelerating space - From the viewpoint inside the ship we see outside bodies accelerate without internal stresses. We can say that they are falling. But the falling bodies maintain their relative position to the speeds of light. All of space is actually falling. We can imagine being held in place by force as space actually accelerates away. A directional speed of light if accelerated in the forward direction will be seen to be increasing in speed. A directional speed of light if accelerated in the opposite direction of travel will be seen to be decreasing in speed.

Fig 1 Fall acceleration of ***A*** as viewed from a left accelerating rocket



An accelerating space is manifested as a balanced change in the two-way speeds of light.

The feeling of being accelerated by force through space is the same feeling as being prevented by the ground from falling downward (the equivalence principle). People on the ship can say that they are being prevented from falling by the mechanical force of the rocket which only occurs if they are undergoing changes in their speed relationship with the two-way speeds of light.

Since we feel a force emanating from the ground as we stand, and since there is no external force causing internal stresses as we fall, gravity should be defined as an acceleration of space and the speeds of light around us must somehow be undergoing balance changes.

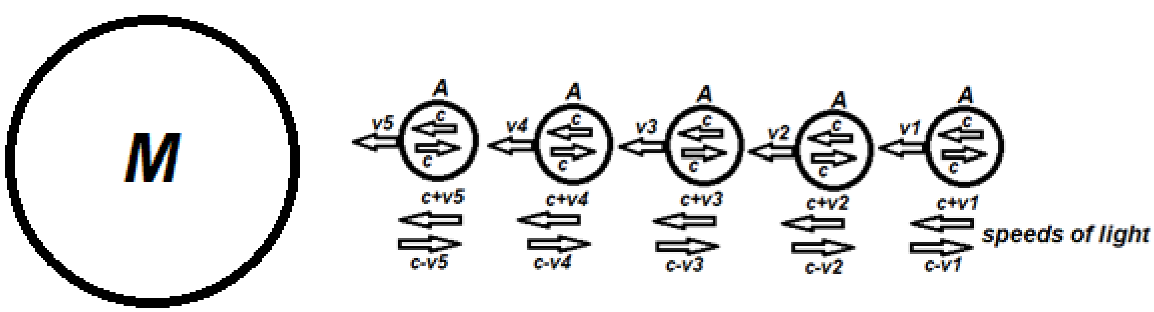
How are the speeds of light configured around a mass to create fall?

There are two ways one can imagine in which a balanced change to the two-way speeds of light can occur, uniform change or sloped change.

A gravitational model of a sloped balanced space around a mass

Fall reference speed in a sloped field (***FR***). ***FR*** is defined as the speed at which a body falls where there is no relative changes to the speeds of light from the viewpoint of the falling body.

Fig 2 ***A*** in fall in ***FR*** in a field where the speeds of light are in sloped balance change



As ***A*** falls in ***FR*** and picks up speed their continues to be no change in its speed relationship with the 2-way speeds of light.

The slope of the field determines the rate of fall. Since we know the fall rate for any mass, ***v*** must be the gravitational escape velocity.

In our prefered frame of reference, a clock runs at its fastest rate of time when it is stationary. At any other speed, time dilation occurs. In a sloped gravitational field, a clock runs at its fastest rate of time when it is travelling in ***FR***. Any other speed (including stationary), time dilation occurs.

Hence two properties of a gravitational field, fall and time-dilation are outcomes of this configuration.

The speeds of light themselves should be considered the fabric of space (the aether).

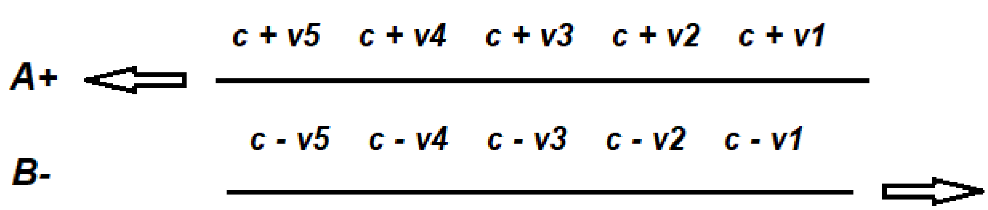
Sloped directional spaces

There are two distinct slopes of the right and left directional spaces.

1 – An ascending inbound directional space that increases its inbound speed the closer it gets to the mass. We will call this an ***A+*** slope.

2 - An ascending outbound directional space that decreases its outbound speed the closer it gets to the mass. We will call this a ***B-*** slope.

Fig 3 ***A+*** slope and ***B-*** slope ***v*** = gravitational escape velocity



We have a gravitational field made up of 2 opposing slopes. Can they be separated into two fields that produce charged acceleration?

If so, then two outcomes must be explained. One - when a charged object is introduced to a charged field why is there two possible and opposite reactions that can occur which is dependent on the charge or nature of the object or field? And two - why is a charged force so much stronger than gravity?

Let’s start by comparing properties of gravitational fall and mechanical forces

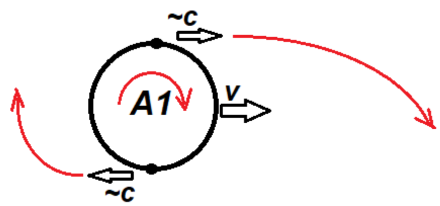
Bodies in motion and motion of internal activity

From a stationary viewpoint, when we view objects in motion, all activity whether internal or on the surface of the moving object is contorted in shape.

Consider a circular spinning disk. Two adjacent points on the outer surface of this disk will carve out circular pathways in opposing directions. When the disk is in motion, curved pathways in the direction of motion are viewed from a stationary observer to have been elongated (expanded). Curved pathways in the opposite direction of motion have been tightened (contracted). We will call these travel segments.

If the tangetial speeds of the two adjacent points of a spinning disk travel at the speed of light, then the only way for motion of the host body to occur is to expand and contract the travel segments.

Fig 4 ***A1*** can only move by expansion and contraction of opposing travel segments



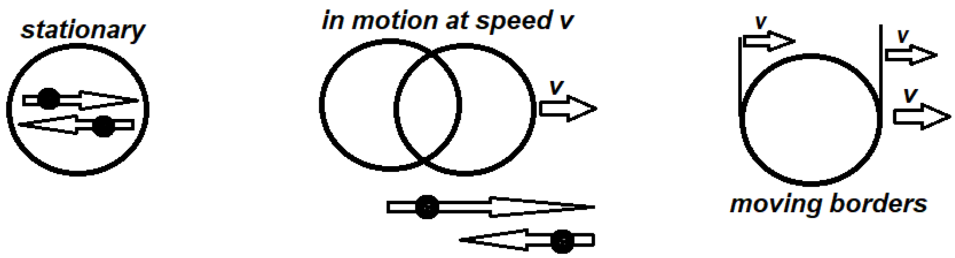
Let's choose a simple representation of this by a circular body that houses an internal particle that travels back and forth within, at or near the speed of light. A particle travel segment length represents the linear one-way directional distance of any internal or external activity in line with the pathway of the body's motion. It is depicted as a rigid one-way travel length from one border to its opposing border. We will call these particle travel segments.

psr -particle travel segment right ***psl*** – particle travel segment left

Note - Internal particle travel does not abruptly change directions along linear pathways. Internal motion has to be curved starting from zero at one end, maximising speed as it heads in the other direction and then slowing down again to zero at the turn around point. Particle travel speeds within segments simply represents the average directional speed.

The right and left borders represent the end points of particle travel where the change in direction is complete and a border is defined. When the body is stationary we observe two opposing particle travel segments of equal length within. When it is in motion we view the internal particle travel segments to be elongated in direction of motion and shortened in the opposing direction. The faster the speed of the body the greater the disparity of lengths.

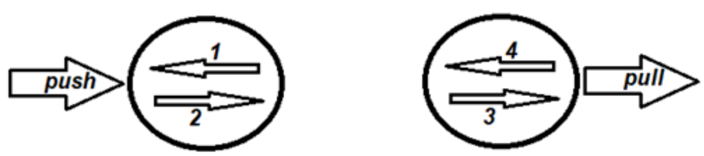
Fig 5 the expansion and contraction of segments, and borders in motion



Each end point of particle travel defines a border. We take note that a body in uniform motion with uneven travel segments retains a stable relationship of opposing borders.

Applied Mechanical Forces Properties of Push and Pull

Fig 6 To accelerate a Body right we can push or pull by applications of mechanical impacts.



A single right impact of push will inwardly violate the left border causing a collision with the internal particle which shortens ***psl*** (thereby tightening left curvature motion), and putting the body under compression. This is immediately followed by a reactionary expansion of ***psr*** (which loosens right curvature motion) that alleviates the stress as the body is pushed to a new speed and a new relationship with the 2-way speeds of light.

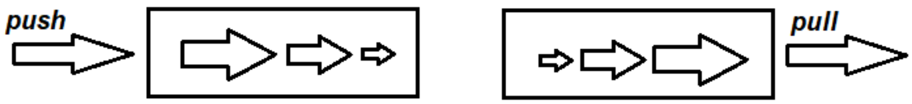
A single right impact by pull will outwardly violate the right border and expand ***psr*** by extending right particle motion (thereby loosening right curvature motion), and put the body under tension. This is immediately followed by a reactionary contraction of ***psl*** (which tightens left curvature motion) that alleviates the stress as the body is pulled to a new speed and a new relationship with the 2-way speeds of light.

From fig 6
Segment 1 undergoes initial contraction and compression.
Segment 2 undergoes compression and reactionary expansion
Segment 3 undergoes initial expansion and tension.
Segment 4 undergoes tension and reactionary contraction.

Acceleration is proportional to the strength of the impacts and their frequency.

Mechanical forces have a point of entry at a border and a gradient of forces along the body that is being pushed or pulled. Internal stresses are stronger near the entry area. As we stand in a gravitational field, the lower parts of our bodies are subjected to greater forces (weight). We are in upward acceleration being pushed by the ground.

Fig 7 Gradient of forces



Push causes compressive forces within which are stronger the closer to entry.

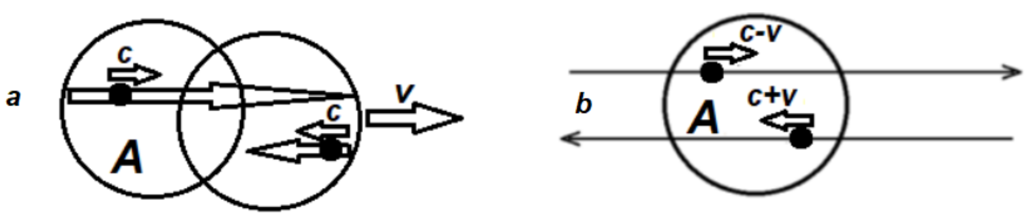
Pull causes tension forces within which are stronger the closer to entry.

Push and pull impacts cause misalignment of particle segments by initial contraction or expansion which affects the synchronization of internal particle motion with its borders causing internal stresses. Relief of internal stresses and resynchronization is achieved by realignment of internal segments as the body accelerates to a new speed and a new relationship with the two-way speeds of light.

Relationship of particle travel segments to the two-way speeds of light

Suppose instead of watching the body move away at a certain speed ***v*** (with uneven particle travel segments), we take the position along side the moving body so it is stationary to our viewpoint. We then change our own relationship with the two-way speeds of light. The particle travel segments (always within their borders) are now seen as equal in length, the body is not seen to be in motion, but the speeds of light are altered.

Fig 8 Two viewpoints of a right moving ***A*** body in a flat field. ***a*** – watching the motion from a stationary viewpoint. ***b*** - moving along at the same speed as ***A***

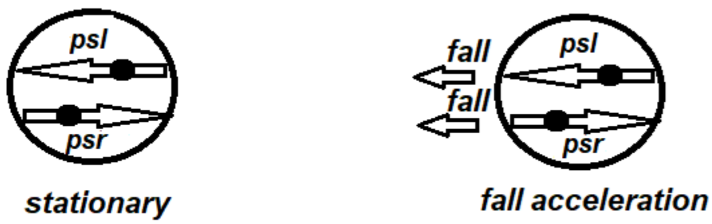


1- An expansion of a segment correlates with a decrease in the speed of light.
2- A contraction of a segment correlates with an increase in the speed of light.
3- Does changes to the speeds of light cause contraction or expasion of segments?

Bodies in fall

Borders of stationary, uniform moving, and free falling bodies, always remain in alignment with endpoints of particle segments to retain shape and structure of the body. Hence no internal stresses caused by applied forces are occuring under these states.

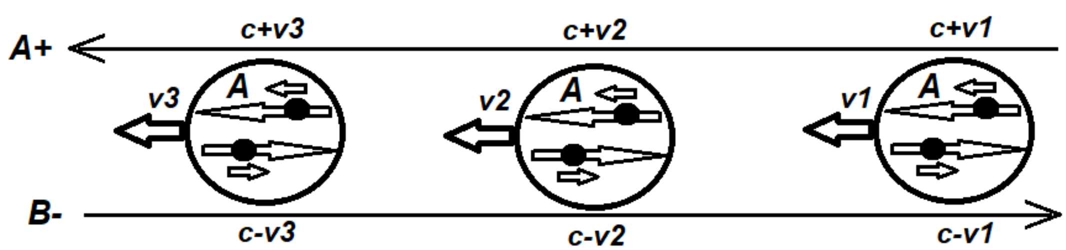
Fig 9   falling particle travel segments



In a gravitational field, one segment falls forward while the other falls backwards. No displacement of segments is occuring and travel segments are not expanded or contracted. Equal fall of both particle segments ensures internal particles stay in sync within the borders of the falling body and maintain alignment. No internal stresses occurs during acceleration by fall, however applied forces causing internal stresses are required to prevent fall.

The fall rate is set by the slope of the balanced field.

Fig 10   A body falling in ***FR***   Our viewpoint is from outside the field



All borders, travel segments and internal particles fall in unison in this field. It is a falling space.

Acceleration by Mechanical Forces in comparison to Fall

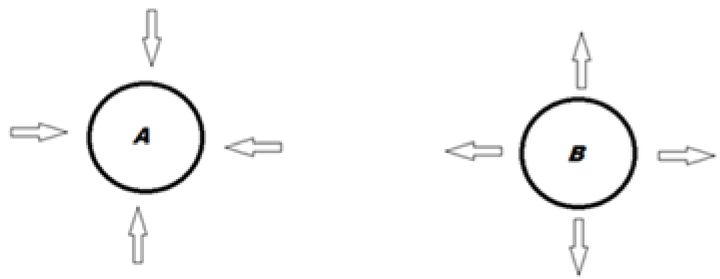
<u>Mechanical force</u> – violation of a border – gradient of forces - alterations in lengths of particle segments causing misalignment and internal stresses – acceleration and realignment to alleviate stress

<u>Fall</u> - No violation of borders - no misalignments or relative change in particle travel segment lengths - simultaneous balanced fall to both segments under no stress.

Unbalanced gravitational space

Suppose there were two types of bodies. One creates fall on inward bound directional space only. The other on outward bound directional space.

Fig 11 Unbalanced fields



Inbound directional space from ***A*** creates an ***A+*** sloped field.

Outbound directional space from ***B*** creates a ***B-*** sloped field.

Let's put ***C*** in an ***A+*** field (***C*** to the right). There will be two distinct directional spaces passing through ***C***. A sloped ***A+*** directional space left. And a flat directional space right.

Fig 12 ***C*** in an ***A+*** field   Will ***C*** fall or not fall?

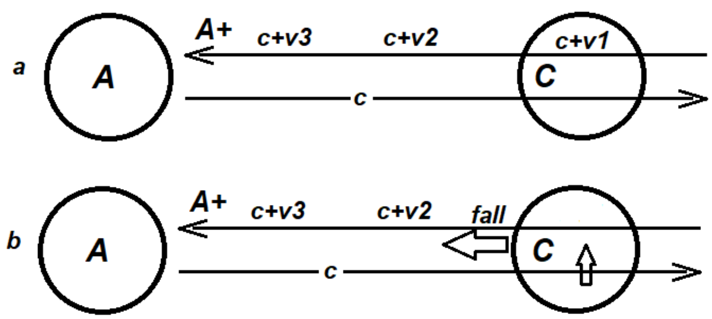


Fig 12 ***a*** - A non-falling ***C*** detects an increasing speed of light in the left direction.

Fig 12 ***b*** - A falling ***C*** detects an increasing speed of light in the right direction.

Primary diectional space

In an unbalanced field, if a body chooses one directional space as its primary space, it will fall or not fall depending on the slope of that primary directional space and maintain its speed relationship with that directional speed of light. Then a change with the speed of light occurs on the opposite segment. The directional space that does not cause a change in speed relationship we will call the Primary Directional Space.

Primary fall is defined as fall on the primary segment.

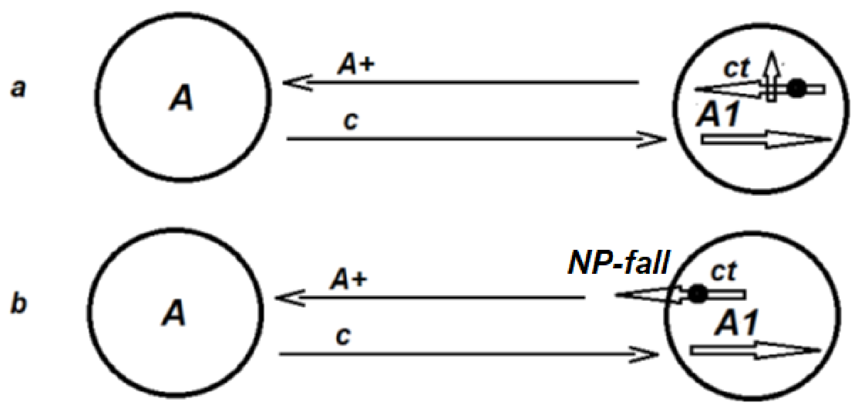
Non-primary fall is defined as fall on the non-primary segment causing initial displacement.

The implication is that there may be two types of bodies (matter) that react in opposite fashion because of their differences in their intrinsic choice of a primary directional space.

Charged Accelerations

Let an ***A+*** slope be ***B's*** primary directional space. Let a ***B-*** slope be ***A's*** primary directional space. NP – non-primary

Fig 13   ***A1*** in ***A***'s field   ***A1*** does not fall



a – The left moving internal particle in relation to ***A1*** is increasing in speed. We have seen in mechanical forces that an increasing speed of light correlates with contraction. If ***psl*** contracts (or is in a contracted state) ***A1*** accelerates right.

b - Another way to look at this is to consider the fall movement of the particle in ***psl***. ***A1*** does not fall in this field but directional space left is sloped so ***psl*** is in non-primary fall to the left and carries the internal particle along with it. This will appear as an increase in left particle speed within the body. The internal particle is on course to reach the falling left border beyond its original location, but since the left border is not falling left, there is a premature turn around of the left moving particle. ***psl*** has been put in a contracted state.

Synchronization of borders in relation to particle segment lengths is momentarily lost.

A unbalanced contracted state creates internal stresses. (types of stresses will be discussed later)

To relieve this stress particle travel in the right direction must expand causing a jump in speed in the right direction.

After ***psr*** has expanded and the body achieves its new speed in the right direction, if the slope is still present the whole process repeats itself.

Magnitude of charged acceleration vs fall

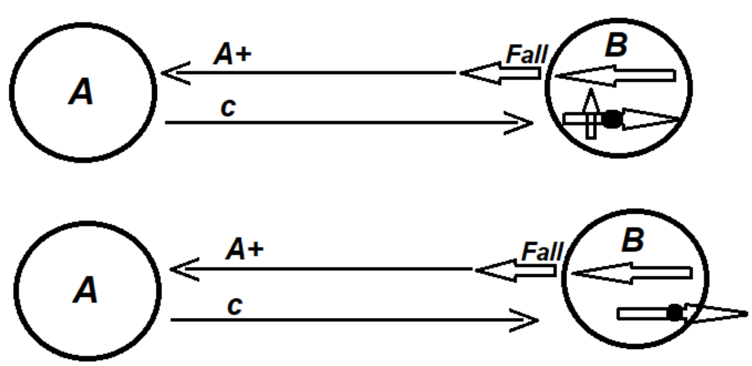
A body in fall has both particle segments accelerating in unison. Fall acceleration of the body is determined by the fall rate of its gravitational space (the slope of a balanced field).

In an unbalanced field of fall however, on every particle round trip, a segment is contracted or expanded causing a misalignment of segments, a violated border and a jump to a new speed relative to the falling or non-falling primary directional space.

Charged acceleration then is proportional to the degree of misalignment (slope which correlates with impact) in an unbalanced field and the rate of oscillation (frequency) of the internal particle motion. Since the speed of the internal particle is very fast, near or at the speed of light, this high rate of internal activity (or spin) can induce a very high rate of acceleration.

A non-primary slope displaces the segment directly. ***A1*** is being accelerated right by contraction away from ***A*** in the opposite direction of fall.

Fig 14 ***B*** in ***A***'s field, ***A+*** is primary for ***B***, direction of fall is left and ***B*** falls left

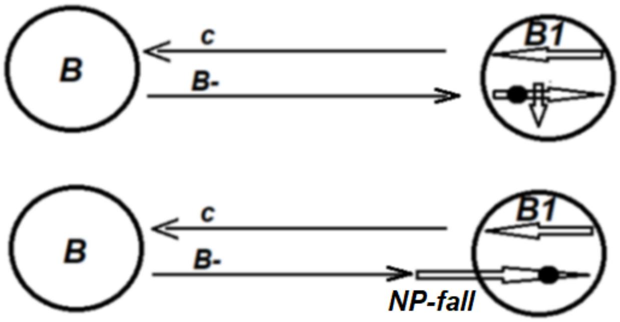


Because an ***A+*** slope is primary for ***B***, ***B*** will fall in this field. But ***A***'s outbound speed of light is flat and does not cause inward fall on ***psl***. ***B***,as it falls, senses an increase of the speed of the internal particle in the right direction.

This is the exact same situation as in fig 13 but we have just switched the choice of a primary field. The particle in ***psr*** is prevented from reaching the end point of its segment. It spends less time in its segment before it is forced to turn around and hence is put in a contracted state.

A primary slope displaces the segment on the other side. ***B*** is being accelerated left by contraction towards ***A***, in the direction of fall.

Fig 15 ***B1*** in ***B***'s field. ***B-*** is not primary for ***B***,   ***NP***- non-primary

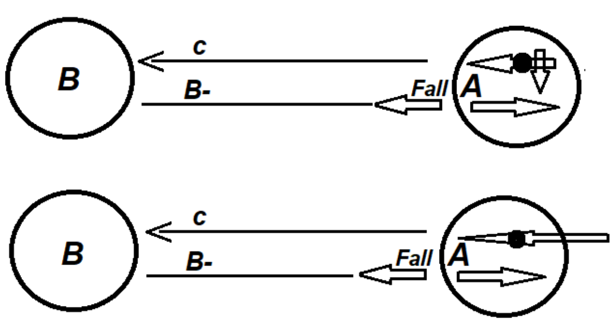


The ***B-*** directional space is a right ascending space but the rate of decrease is in the direction of fall. As a particle moves right to left in primary ***psl***, it detects the particle in ***psr*** to be decreasing in speed.

The non-primary segment ***psr*** wihin ***B1*** is falling left. The internal particle continues to move right till it reaches ***B1***'s right border. The actual distance travelled has been extended along with the amount of time needed for this excursion (since the left falling segment slows the speed of the particle within ***B1***). This is an expanded state. Loss of synchronization occurrs momentarily until the return segment is contracted. Charged acceleration is to the right.

A non-primary slope displaces the segment directly. ***B1*** is accelerated right, away from ***B*** in the opposite direction of fall.

Fig 16 ***A*** in ***B***'s field, ***B-*** is primary for ***A***, direction of fall is left and ***A*** falls left



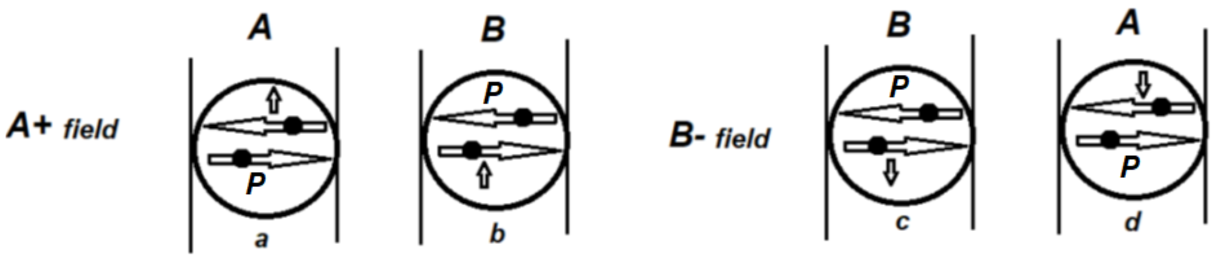
This again is the same situatation as fig 14 but the primary field has been switched. As ***A*** falls left it detects a decrease in the speed of the internal particle within ***psl***. This is because the segment is not falling left. The internal particle within this segment must travel a longer distance to reach the left falling border. It takes more time, its relative speed has been decreased. This is an expanded state. Charged cceleration is left.

A primary slope displaces the segment on the other side. ***A*** is acclerated left towards ***B***, in the direction of fall.

What if we prevent fall?

It does not matter if the body is held in place. It is the internal displacement of slopes within the body that causes loss of border synchronization.

Fig 17 The removal of a directional field on bodies held in place   p- primary segment



a - From the viewpoint of a non-accelerating particle in ***A***'s primary directional space right, it detects an increasing particle speed in the left direction causing a contracted state.

b – From the viewpoint of left fall in ***B***'s primary directional space left, it detects an increasing particle speed in the right direction causing a contracted state.

c – From the viewpoint of a non-decelerating particle in ***B***'s primary directional space left, it detects a decreasing particle speed in the right direction causing an expanded state.

d- From the viewpoint of left fall in ***A***'s primary directional space right, it detects a decreasing particle speed in the left direction causing an expanded state.

A non-primary segment in unbalanced fall causes direct initial displacement on the segment and acceleration of the body in the opposite direction of fall. A primary segment in unbalanced fall causes initial displacement of the segment on the other side and acceleration of the body in the direction of fall.

Addition and removal of primary and non-primary slopes to particle segments

Addition of an ***A+*** slope to a particle segment in ***B***; Primary fall and contraction of the opposte segment.

Removal of an ***A+*** slope from a particle segment in ***B***; Removal of primary fall and removal of contraction on the opposite segment.

Addition of an ***A+*** slope to a particle segment in ***A***; Non-primary fall and direct contraction of the segment.

Removal of an ***A+*** slope from a particle segment in ***A***; Removal of non-primary fall and removal of contraction on the segment.

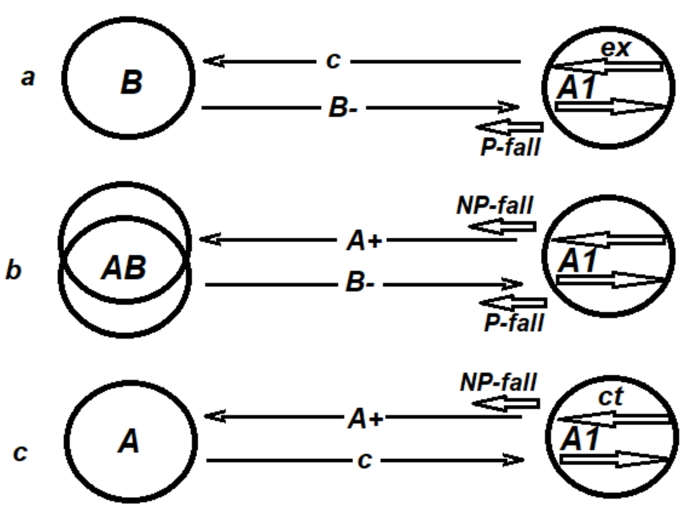
Addition of an ***B-*** slope to a particle segment in ***A***; Primary fall and expansion of the segment on the other side.

Removal of an ***B-*** slope from a particle segment in ***A***; Removal of primary fall and removal of expansion on the segment on the other side.

Addition of a ***B-*** slope to a particle segment in ***B***; Non-primary fall and direct expasion of the segment.

Removal of a ***B-*** slope from a particle segment in ***B***; Removal of non-primary fall and removal of expansion on the segment.

Fig 18 Changing fields with ***A1*** to the right. P – primary NP – Non-primary
ex - expansion ct - contraction

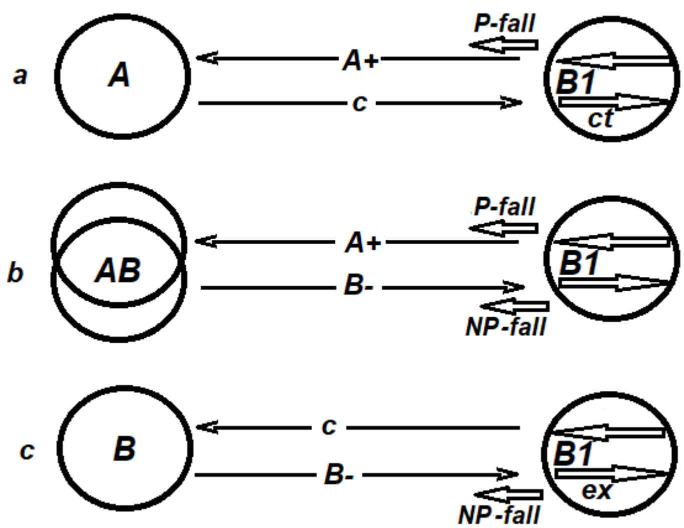


In fig 18a the addition of ***B*** to the left of ***A1*** (originally in a flat balanced field) creates a primary ***B-*** slope on ***psr*** of ***A1*** which causes primary fall and expands the segment on the other side (***psl)***. Charge force is left.

In 18b the addition of ***A*** to the left creates a non-primary ***A+*** slope on ***psl*** of ***A1*** which affects the particle segment directly. ***psl*** of ***A1*** is contracted which cancels its expansion and ***A1*** is in a sloped balanced field with no charged forces

In 18c the removal of ***B*** from the left removes the ***B-*** slope and primary fall on ***psr*** of ***A1*** which removes expansion on ***psl*** which puts it in contraction. Charge force is right.

Fig 19 Changing fields with ***B1*** on the right. P – Primary NP – Non-primary

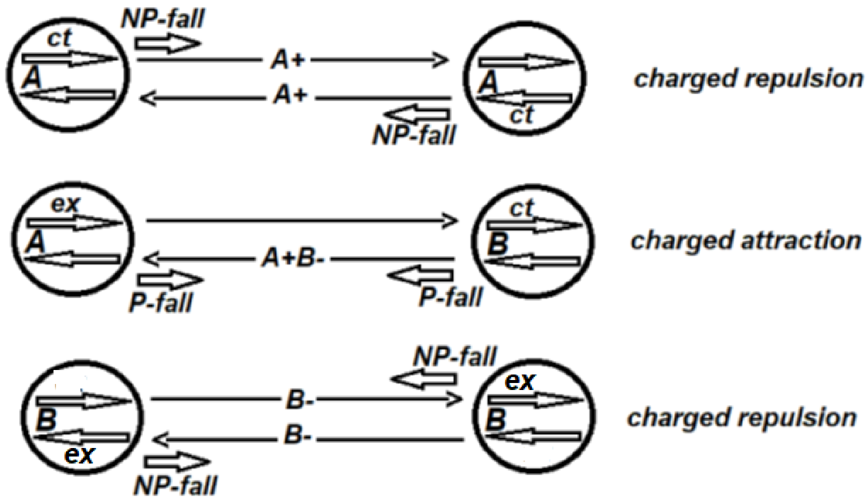


In fig 19a the addition of a primary ***A+*** slope on ***psl*** of ***B1*** causes primary fall and contraction on the opposing segment (***psr***). Charge force is left.

In 19b the addition of ***B*** to the left creates a non-primary ***B-*** slope on ***psr*** of ***B1*** which affects the particle segment directly. ***psr*** of ***B1*** is expanded which cancels its contraction and ***B1*** is in a sloped balanced field with no charged forces.

In 19c the removal of ***A*** from the left removes the ***A+*** slope and primary fall on ***psl*** of ***B1*** which removes contraction on ***psr*** and puts it in expansion.

Fig 20   repel and attract   P – primary   NP – non primary



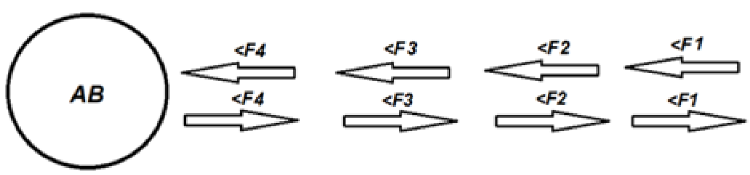
Gradient of forces in a gravitational field

Consider a balanced gravitational field. How has space been changed?

Bodies are accelerated inwards towards a mass and the strength of fall is greater towards the source of the field. We have a gradient of forces much like a configuration of mechanical pull. A neutral mass is the entry point of force and it distributes a graded pull force along its field.

Gravitational fall can be viewed as a balanced pull force on space.

Fig 21   Gradients of fall by pull   F4 > F3 > F2 > F1



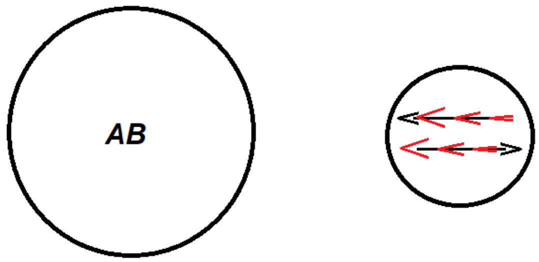
There are two types of pulls on a directional space.

Directional space inbound is a graded directional space where the strength of pull on any inward aiming segment within its space is pulled from the front. Its gravitational pull is inwards. This pull will be called fall by pull-forward.

Directional space outbound is a graded directional space where the strength of pull on any outward aiming segment within its space is pulled from the back. Its gravitational pull is also inwards. This pull will be called fall by pull-back.

Pull from the front is primary for ***B***, pull from behind is primary for ***A***. Equal pull in the same direction of both particle segments in a body ensures no internal misalignment leading to acceleration by force. Both borders are pulled in.

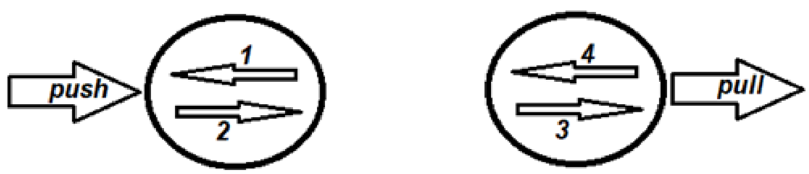
Fig 22 Graded pull forces on particle segments in ***AB***'s gravitational field



Gradient of forces in mechanical acceleration

When undergoing mechanical acceleration there are four ways in which a force is received by a particle segment.

Fig 23

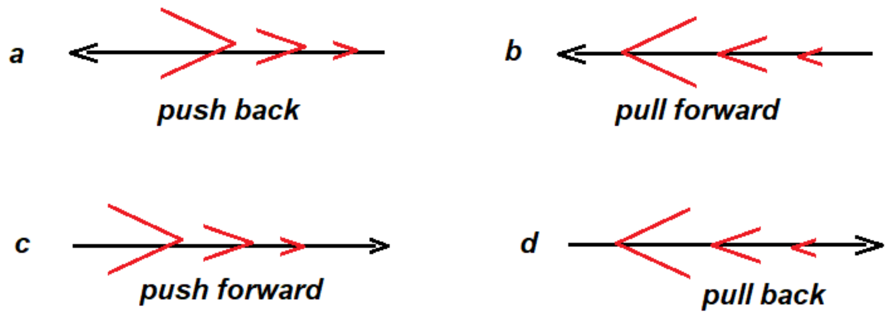


1 Push back	compression contraction	detachment of ***psl*** from the front
2 Push forward	compression expansion	detachment of ***psr*** from the back
3 Pull forward	tension expansion	detachment of ***psr*** from the front
4 Pull back	tension contraction	detachment of ***psl*** from the back

Detachment infers the entry point of force into a segment causing a change in border location and a jump to another speed.

Along a segment within an accelerating body, the highest magnitude of the gradient of forces is at the point of detachment. This is the entry location of force where the border is violated.

Fig 24   Gradient of forces on particle segments   Origin of force is on the left



Gradient of forces in unbalanced fields

Forces are stronger the closer to the sorce of the field. Gradients go from high to low outward from the source.

A in an ***A+*** field - ***A*** on the right.

The displaced particle segment is inbound ***psl***. Direction of force is outward. Fig 24 ***a***

This is a push back causing compression and contraction on ***psl***.

B in a ***A+*** field - ***B*** on the right

The displaced particle segment is outbound ***psr***. Direction of force is inward. Fig 24 ***d***

This is a pull-back causing tension and contractrion on ***psr***.

B in an ***B-*** field - ***B*** on the right

The displaced particle segment is outbound ***psr***. Direction of force is outward. Fig 24 ***c***

This is a push forward causing compression and expansion on ***psr***.

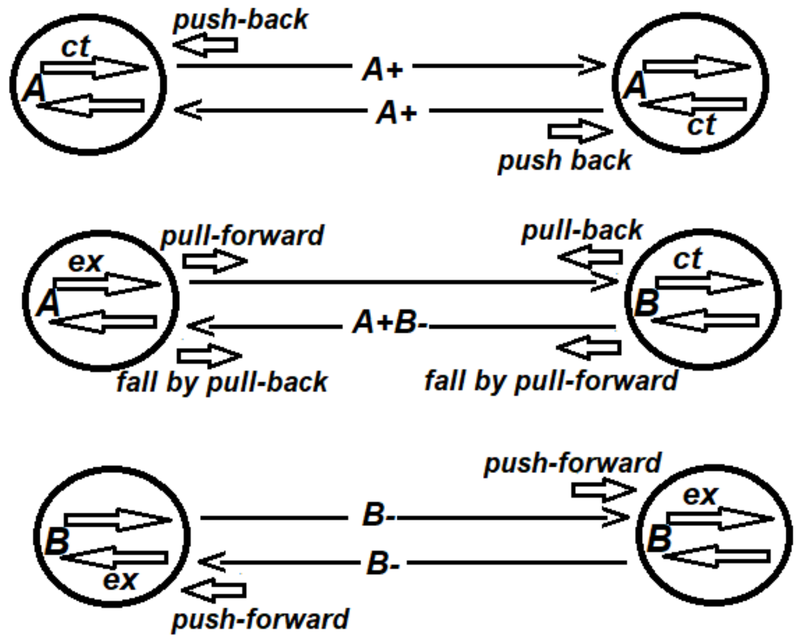
A in a ***B-*** field - ***A*** on the right

The displaced particle segment is inbound ***psl***. Direction of force is inward. Fig 24 ***b***

This is a pull forward causing tension and expansion on ***psl***.

Note   push-back cancels a pull-forward   push-forward cancels a pull-back

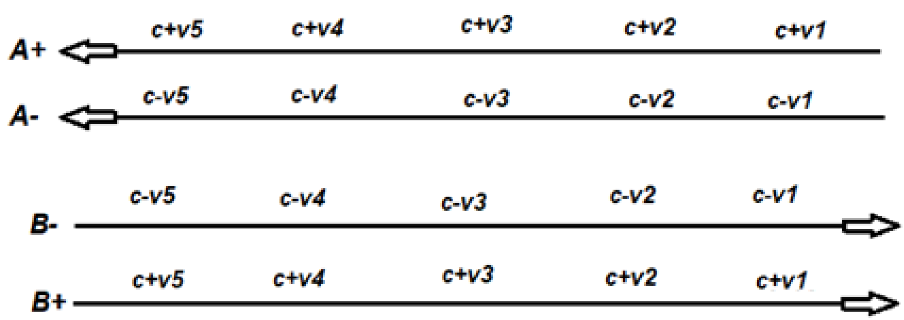
Fig 25 Bodies are pushed out or pulled in ct – contraction ex - expansion



Anti-Matter

Can we eliminate slopes by adding anti slopes that flatten the field? In fig 27 an ***A-*** slope will flatten an ***A+*** slope. A ***B+*** slope will flatten a ***B-*** slope.

Fig 26 directional slopes v = gravitational escape velocity where ***v5 >v4>v3>v2>v1***

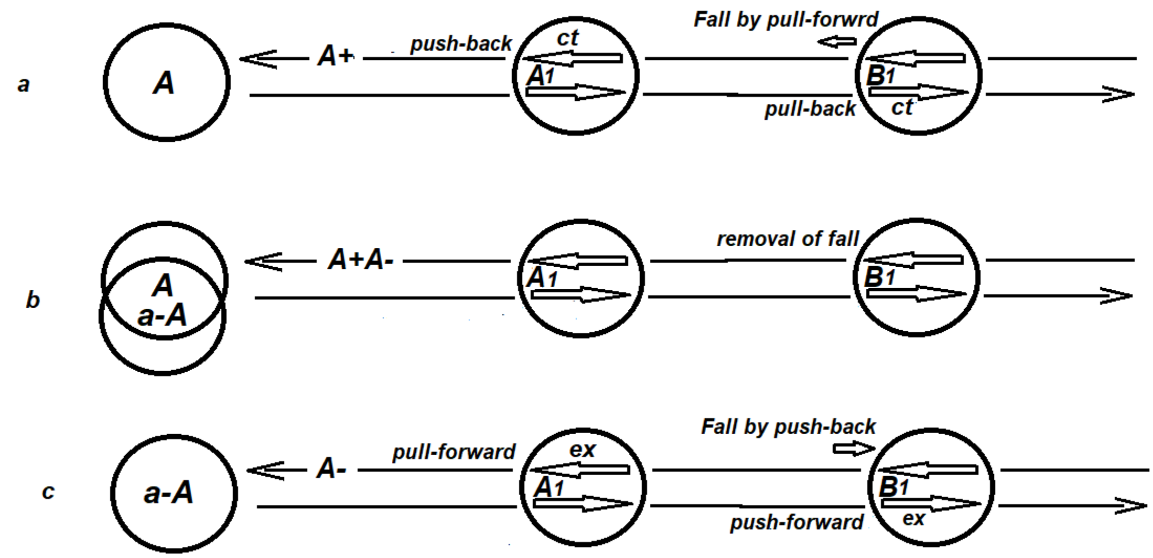


If all slopes must be associated with bodies, then slopes that negate slopes are considered to originate from anti-bodies.

Let the source of an ***A-*** slope be a body denoted as ***antiA (a-A)***

Let the source of a ***B+*** slope be a body denoted as ***antiB (a-B)***

Fig 27   Reversing an ***A+*** field by adding an ***a-A***   ***A1*** and ***B1*** to the right



Adding ***a-A*** to the source of the field cancels all the effects of ***A***.

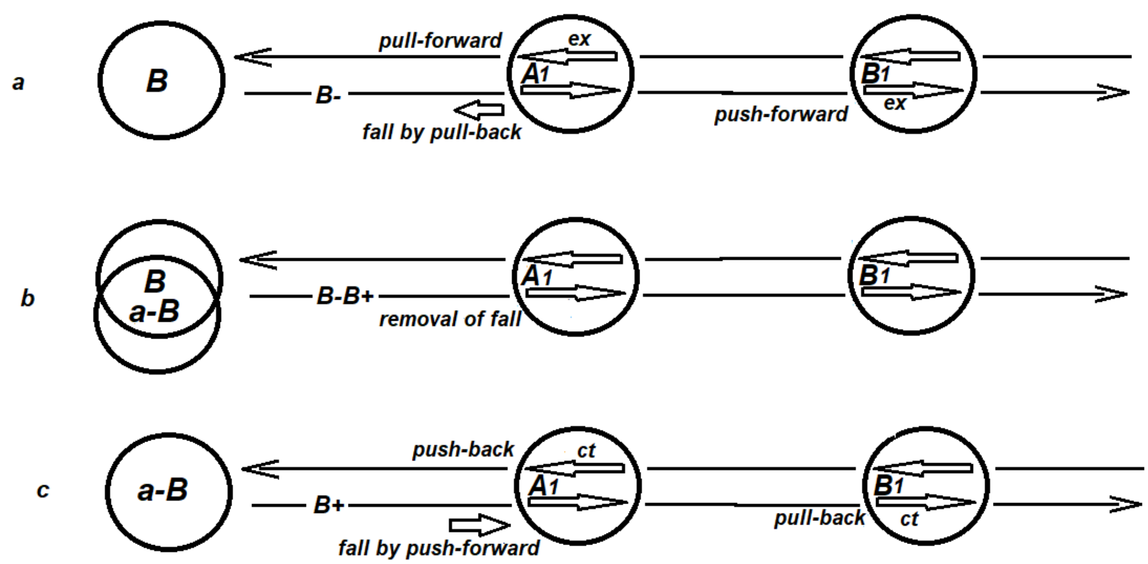
a & b - Push-back on ***psl*** of ***A1*** is removed by adding a pull-forward.

- Fall by pull-forward on ***B1*** is removed by adding fall by push-back.
- Pull-back on ***psr*** of ***B1*** is removed by adding a push-forward.

c - removing ***A*** from the source we see the effects of ***a-A*** on non anti-bodies.

A1 accelerates towards ***a-A***.   ***B1*** accelerates away from ***a-A***.

Fig 27b   Reversing a ***B-*** field by adding an ***a-B***   ***A1*** and ***B1*** to the right



Adding ***a-B*** to the source of the field cancels all the effects of ***B***.

a & b - Fall by pull-back on ***A1*** is removed by adding fall by push-forward.

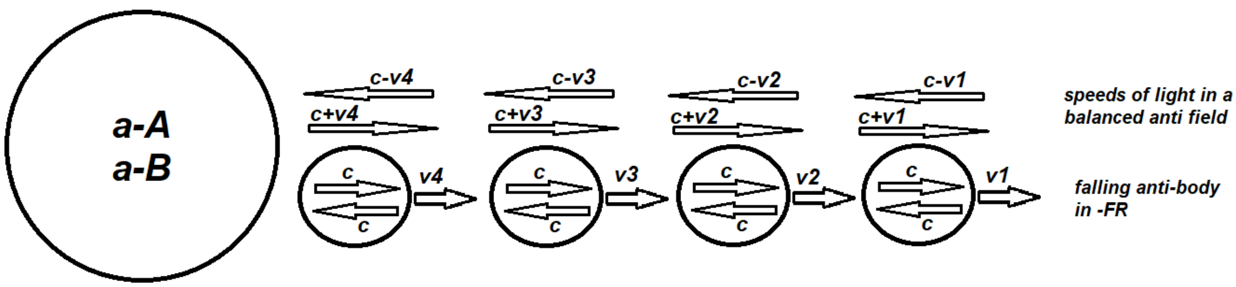
- Pull-forward on ***psl*** of ***A1*** is removed by adding a push-back.
- Push-forward on ***psr*** of ***B1*** is removed by adding a pull-back.

c - removing ***B*** from the source we see the effects of ***a-B*** on non anti-bodies.

A1 accelerates away from ***a-B***. ***B1*** accelerates towards ***a-B***.

How do anti-bodies relate to each other. Consider negative ***FR*** (***-FR***), where the falling anti-body undergoes no relative change to speed ***c***.

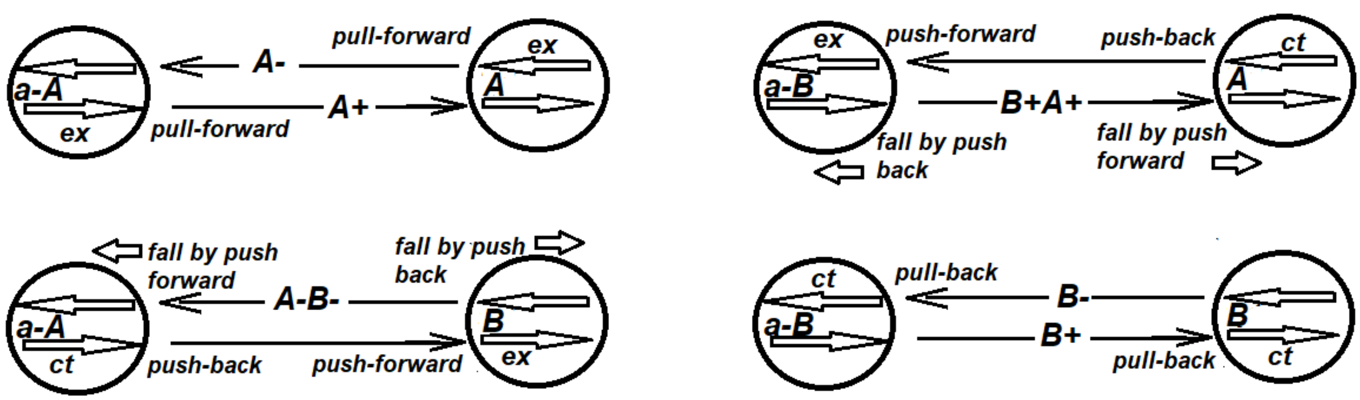
Fig 28 An anti-body falling in ***-FR***



The anti-body decelerates as it moves in an outbound direction. Gravitational pull hence is inward. Anti-bodies relate to each other in the same manner as non anti-bodies relate to each other.

Non anti-bodies will have the same reverse effects on their fields as anti-bodies do on non-antibody fields.

Fig 29 Fields between bodies and anti-bodies



Relationship of forces to paired bodies

AB AB	Inward fall of both particle segments	fall attraction	no charged forces
A A	inward fall of non-primary particle segments		charged repulsion
B B	inward fall of non-primary particle segments		charged repulsion
A B	Inward fall of primary segments		charged attraction
a-AB a-AB	Inward fall of both particle segments	fall attraction	no charged forces
a-A a-A	Inward fall of non-primary particle segments		charged repulsion
a-B a-B	Inward fall of non-primary particle segments		charged repulsion
a-A a-B	Inward fall of primary segments		charged attraction

Forces are reversed when body meets antibody

AB a-AB	Outward fall of both particle segments	fall repulsion	no charge forces
A a-A	Outward fall of non-primary particle segments		charged attraction
B a-B	Outward fall of non-primary particle segments		charged attraction
A a-B	Outward fall of primary segments		charged repulsion
B a-A	Outward fall of primary segments		charged repulsion

Fall fields around bodies are pull fields to bodies and push fields to antibodies.
Fall fields around anti-bodies are pull fields to anti-bodies and push fields to bodies

Directional space that pulls forward or pushes back (A+, A-)

B body segments (anti and non-anti) retain attachment and fall. Detachment occurs on the opposite non-primary segment from the rear starting point. Changes in rear starting points (the entry point of the force) are caused by pull-back or push-forward and initiate the new speed.

A body segments undergo push-back or pull-forward directly, detaching from the front.

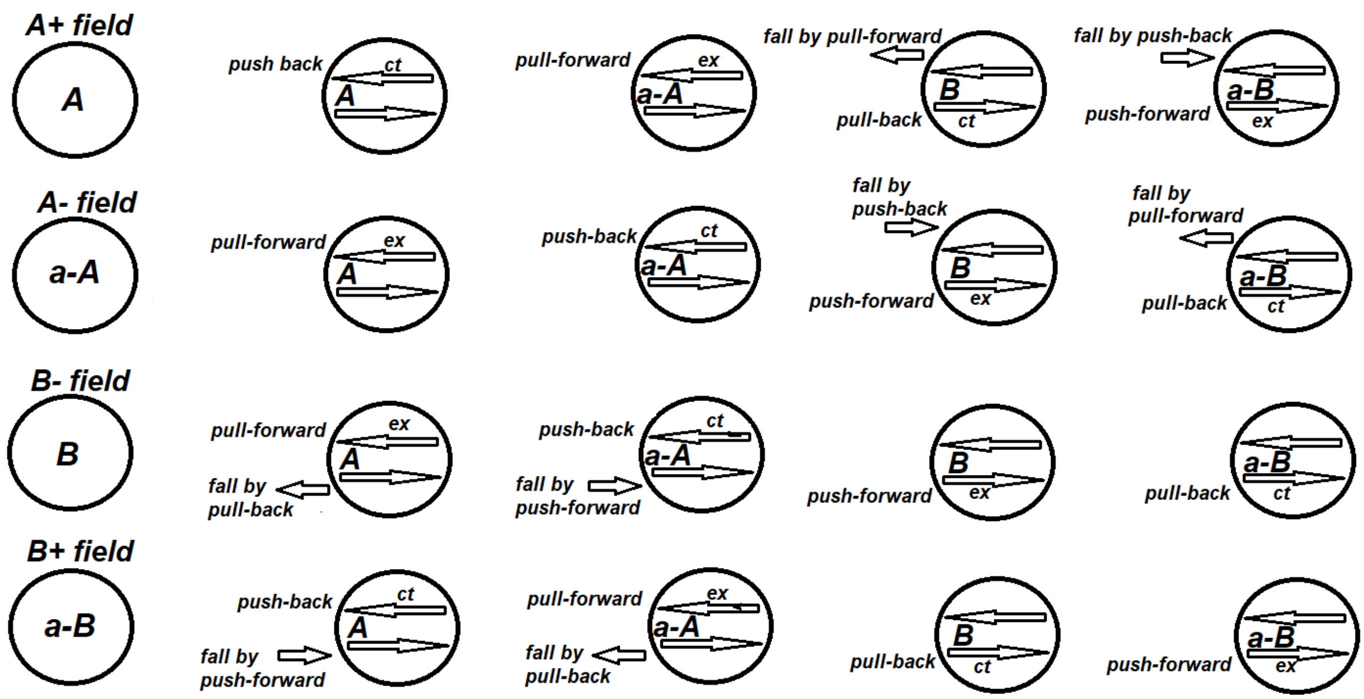
Directional space that pulls back or pushes forward (B-, B+)

A body segments (anti and non-anti) retain attachment and fall. Detachment occurs on the opposite non-primary segment from the front end point. Changes in front end points (the entry point of the force) are caused by pull-forward or push-back and initiate the new speed.

B body segments undergo push-forward or pull-back directly, detaching from the back.

Summary of charged pull and push forces

Fig 30   Fall and charged effects on bodies and anti-bodies in unbalanced fields

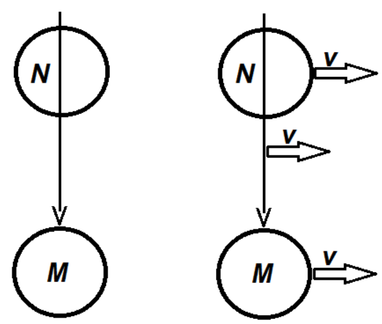


Part 2

Gravitational field lines

A gravitational field line is a straight gravitational path of fall force linking the source of the field line to a recipient. Consider the gravitational pathway of an ***M*** field linking ***N*** to ***M***. If there is no relative lateral motion between ***N*** and ***M***, the gravitational field line will be non-rotating and straight.

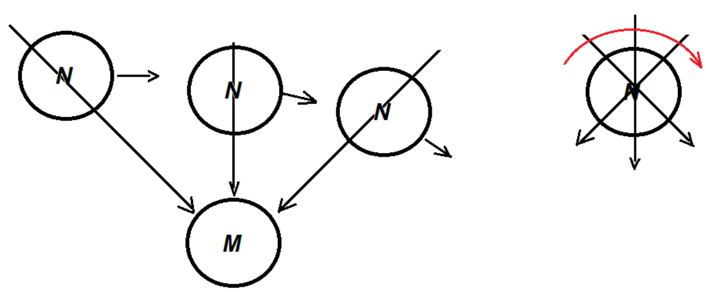
Fig 1 no relative lateral motion



Relative lateral motion, rotation of gravitational field lines and deviation of motion

As well as creating inward fall, relative lateral motion between ***N*** and ***M*** will rotate ***M***'s gravitational field lines. This rotating fall force will curve the pathway of ***N***'s motion within the field. It will cause turn.

Fig 2a Relative lateral speeds of ***N*** and ***M*** as ***N*** passes by horizontally. Let ***M*** be a much larger mass so we only consider the effect of ***M***'s field on ***N***.



N, moving horizontally right**,** is in motion in a ***cw*** rotating gravitational field. ***N*** is travelling though a rotating space. All internal segments undergo rotational fall that will cause ***N***'s pathway of motion to deviate ***cw***.

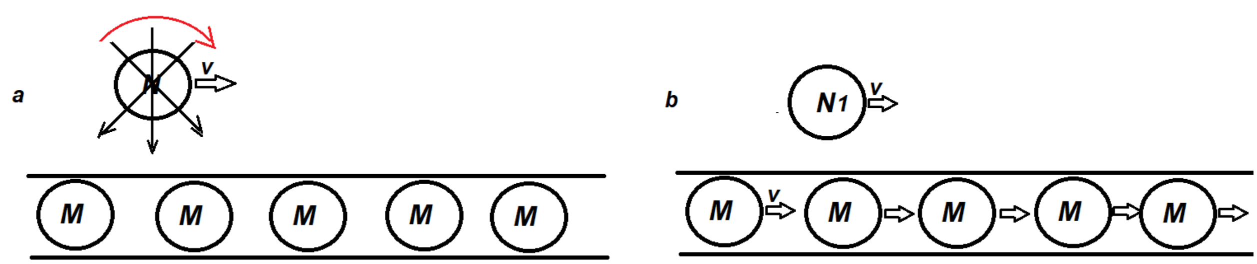
Since the field is balanced all internal particle segments fall and rotate in unison and there is no internal stresses as deviation of motion occurs.

Circuits and rotational fields

We will define a circuit as a confined linear pathway that contain stationary or moving bodies. Lateral motion through circuits may cause rotational fields surrounding the circuit. For a body within the surrounding field to undergo deviation forces, it must have some relative lateral motion with the bodies inside the circuit.

Gravitational circuit

Fig 2b Two types of motion through ***M***'s gravitational fields. ***M*** bodies locations are confined to a specific location within the circuit in ***a***, and a dedicated confined motion and direction in the circuit in ***b***. ***M*** and ***N*** are non-charged bodies.



Gravitational effects on the ***M*** bodies by ***N*** and ***N1*** are held in check by the circuit.

From our stationary viewpoint we observe two right lateral movements of neutral bodies occuring in two different fields. ***N*** travels through a ***cw*** rotational gravitational space, while ***N1***, travelling at the same speed as the ***M*** bodies, senses no rotational forces from ***M***'s gravitational fields.

Both ***N*** and ***N1*** will fall downward by gravitational force towards the ***M*** bodies. But are their pathways of movement exactly the same?

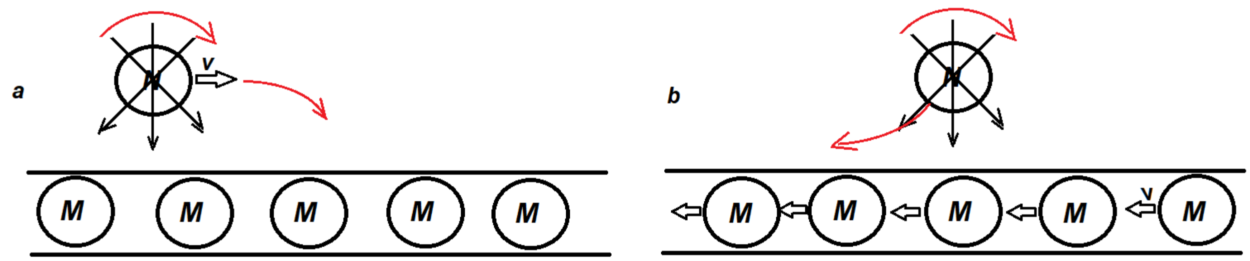
Since the gravitational pathways are always aimed downward on ***N1***, there is no deviated forces acting on ***N1*** and no loss of horizontal speed as it falls.

N however will deviate ***cw*** in its motion but with each deviation, horizontal lateral speeds are reduced. ***N*** will always fall into the circuit at a lateral speed slower than what it began with. Given enough hight, both horizontal speed and deviation forces will both cease to exist.

Relative motion between a body and a rotational field

Fig 2c Two points of view

N moves through a field the field moves through ***N***



The two above cases are one and the same as we have only changed our viewpoint. ***M*** bodies gravitational lines (rotational fall forces) are in ***cw*** rotation in relation to ***N*** causing ***cw*** curved deviation.

N in **a** loses right lateral motion as it curves downward. Its curvature of motion is ***cw***. ***N*** in **b** gains left lateral motion as it curves downward. Its curvature of motion is also ***cw***.

A body cannot be placed stationary and not deviate within a rotational field. As long as there is relative lateral motion, there is motion through a field which will produce motion by deviation forces.

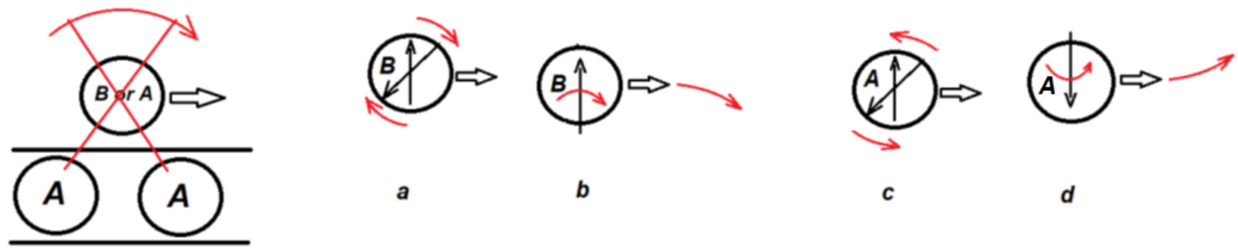
In balanced rotational fields both opposing particle vertical segments are rotated and pulled by fall, synchronization is maintained and no internal stresses are felt.

Rotational Unbalanced Gravitational Fields

In a balanced rotating field, both vertical directional segments fall and rotate. In an unbalanced rotational field only one directional space falls and rotates. This creates displacement of particle travel in two ways. In-line with its direction of travel as well as displacement perpendicular to particle motion. Rotational charged forces then arise that are required to maintain synchronization.

The adjacent bypassing bodies will also differ to which directional space has been put in rotation. It is determined by their choice of a primary directional space.

Fig 3a Internal rotating charged forces on vertical particle segments as bodies move laterly through an ***A-cw*** rotational field above an ***A*** circuit.



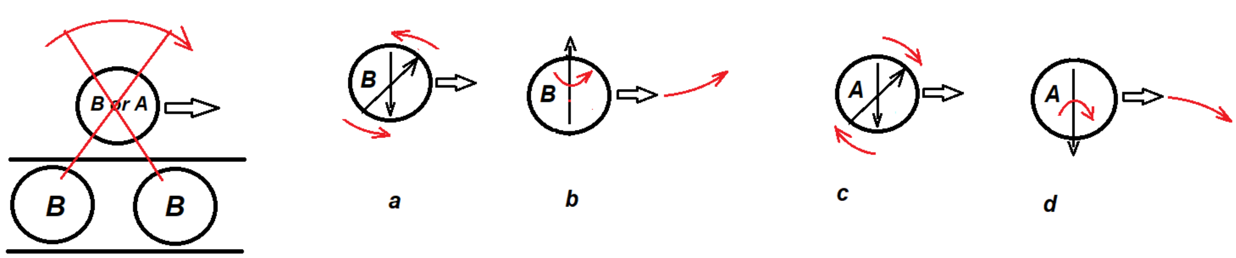
a and **b**

1- ***B***'s downward primary segment falls forward and rotates ***cw*** by unbalanced rotating fall.
2- A charged ***cw*** rotating pull-back force is initiated on the upward vertical segment.
3- Rotating forces are caused by lateral stress on the segments as the internal particle travels through a rotating segment.
4- The rotating curvature forces on the vertical segments are spread to all internal segments causing ***cw*** deviation of ***B***'s motion.

c and **d**

1- ***A***'s downward non-primary segment is rotated by non-primary fall ***cw***, equating to having its upward primary particle segment fall rotate ***ccw***. Same situation as before but a switch in choice of a primary field.
2- A charged ***ccw*** rotating push-back force is initiated on the non-primary upward vertical segment.
3- The rotating curvature forces on the vertical segments are spread to all internal segments causing ***ccw*** deviation of ***A***'s motion.

Fig 3b Internal motion of particle segments as bodies pass a ***B-cw*** rotational field



a and **b**

1- ***B"***s upward non-primary segment is rotated by non-primary fall ***cw*** equating to having its downward primary particle segment fall rotate ***ccw***.

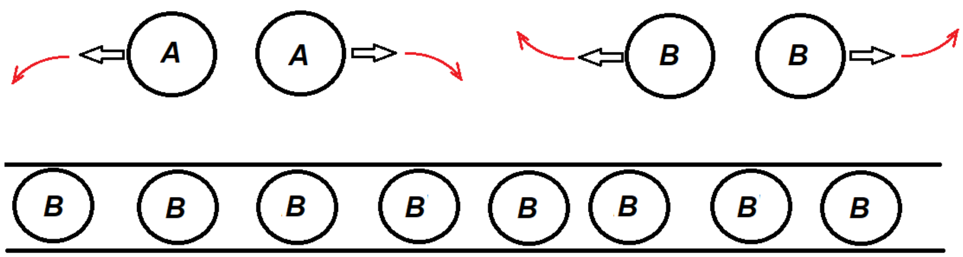
2- Charged ***ccw*** rotating push-forward force on the upward vertical segment causes expansion and ***ccw*** rotation.
3- The rotating curvature forces on the vertical segments are spread to all internal segments causing ***ccw*** deviation of ***B***'s motion.

c and **d**

1- ***A***'s upward primary segment falls back while being rotated ***cw*** by unbalanced primary fall.
2- Charged ***cw*** rotating pull-forward force on the downward segment causes expansion and ***cw*** rotation.
3- The rotating curvature forces on the vertical segments are spread to all internal segments causing ***cw*** deviation of ***A***'s motion.

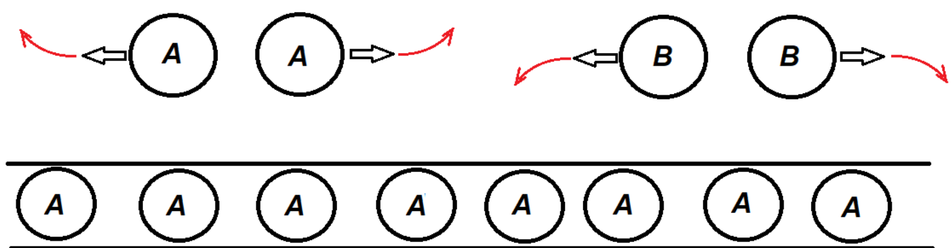
Properties of lateral motion above stationary one body type circuits

Fig 3c Right and left motion of ***A*** and ***B*** bodies over a stationary ***B*** circuit



A bodies deviate into a ***B*** circuit, ***B*** bodies deviate away from a ***B*** circuit.

Fig 3d Right and left motion of ***A*** and ***B*** bodies over a stationary ***A*** circuit



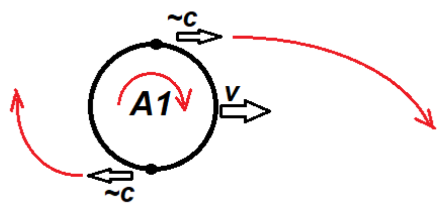
A bodies deviate away from an ***A*** circuit, ***B*** bodies deviate into an ***A*** circuit.

In any one body circuit both bodies deviate ***ccw*** in one direction and ***cw*** in the other.

Like bodies deviate inward and opposite bodies deviate outward.

Spinning bodies

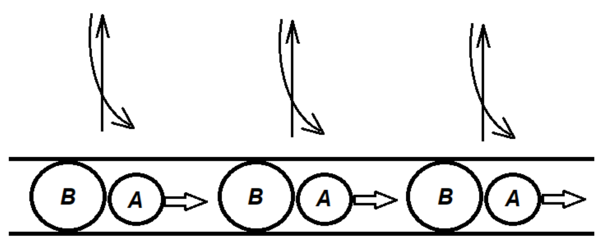
For the next section lets take the special case where bodies are always in spin. Hence the internal segments are on the exterior surface of the body.



Active circuits or circuits with current

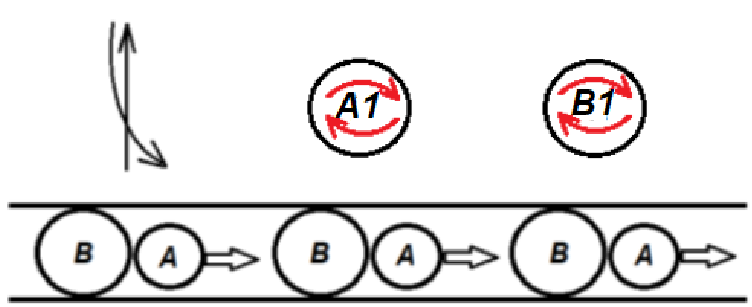
We will look at a circuit containing both body types but where ***B*** bodies are rigidly attached to the circuit and cannot move, and where ***A*** bodies (not neccesary all) can move uniformely through the circuit (partially hindered) to the right or left. Two body type circuits are neutral in charge. When ***A*** bodies are in motion relative to the ***B*** bodies we will say the circuit is active. (Note we could have chosen the reverse, ***A*** bodies ridgidly attached and ***B*** bodies put in motion)

Fig 4a Field above an active circuit ***A+*** downward space is represented to rotate ***ccw***



Right moving ***A*** bodies curve downward ***A*** space into ***ccw*** rotation as viewed by a ***B*** body whereas ***A*** bodies sence that their primary upward ***B*** space is curved in ***cw*** rotatation.

Fig 4b ***A1*** and ***B1*** placed and released above an active circuit, stationary in relation to the ***B*** bodies. Both in cw spin.

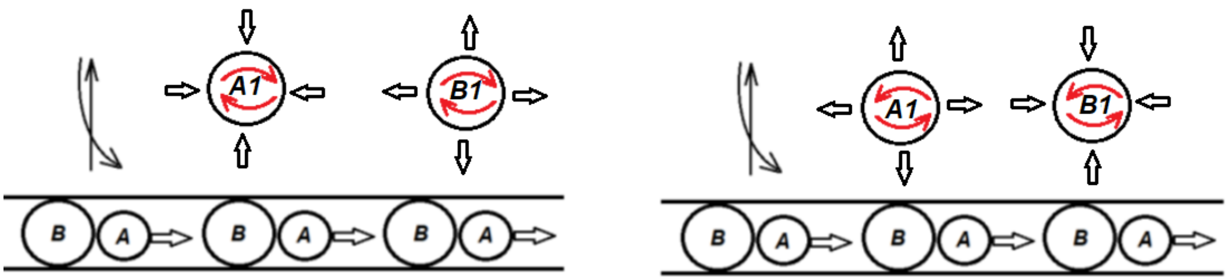


The forces acting on A1 and B1

1- ***A*** bodies from any location within the circuit exert outward push forces on ***A1*** and inward pull forces on ***B1***.
2- Right moving ***A*** bodies in the circuit exert ***cw*** curvature forces on ***A1*** and ***ccw*** curvature forces on ***B1***.
3- Stationary (ridgidly held in place) **B** bodies from any location within the circuit remove the outward push forces on ***A1*** and the inward pull forces on ***B1***.
4- Only lateral forces on ***A1*** and ***B1*** segments remain.
5- Since push and pull forces have been removed, no expansion or contraction of segments occurs. Hence no motion occurs and ***A1*** and ***B1*** can remain stationary.

Since the segments are surface segments the lateral presure always aims inward or outward of the body depending on the spin orientation of the body..

Fig 4c



This field is a **magnetic field.**

The embedded ***B*** bodies determine motion within its surrounding field. Each ***B*** body with its associated pressurized field is considered to be a single magnet. If a body has no relative motion to the individual magnets, then that body is stationary in the field.

Motion through a magnetic field

Consider body ***A1*** in the field of the above magnetic circuit. It's surface segments are under pressure to curve ***cw***. If we put ***A*** in motion we create disparity of length in the particle segments in line with the motion. This will create deviation of motion. But unlike rotational fields, no matter what direction ***A*** travels, its curvature deviation does not change. It is always ***cw***.

Fig 4c disparity of particle segment lengths causes deviated ***cw*** motion

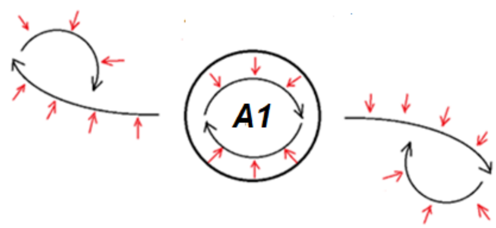
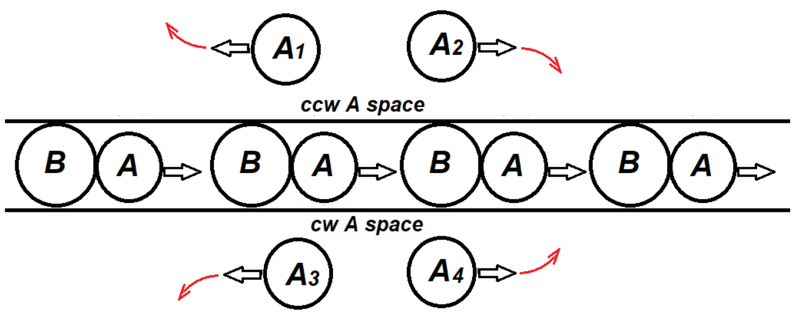


Fig 4d ***A*** bodies in motion above and below an active circuit.



A magnetic field surrounds the circuit. Lateral motion within the surrounding field, in relation to the ***B*** bodies, will be deviated. ***A*** and ***B*** bodies will behave in opposite fashion

Above the circuit - ***A1*** moving left will deviate ***cw*** upward

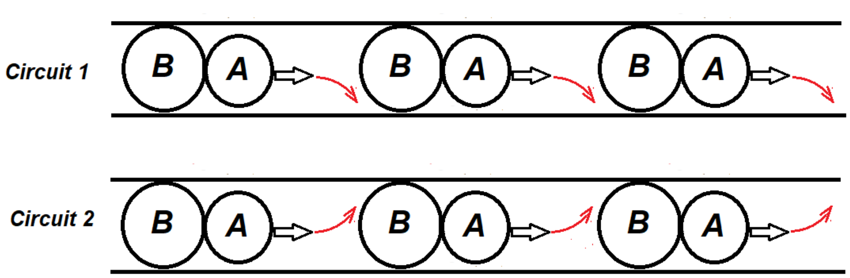
A2 moving right will deviate ***cw*** downward

Below the circuit - ***A3*** moving left will deviate ***ccw*** downward

A4 moving right will deviate ***ccw*** upward

Side by side circuits

Fig 5a Side by side active circuits Circuit 1 and 2 both have ***A*** bodies in right motion relative to their stationary ***B*** bodies.

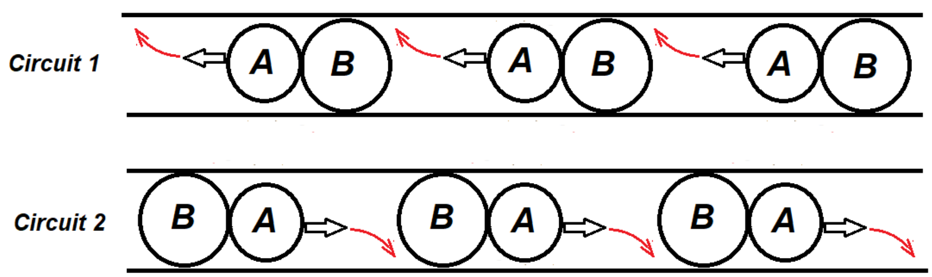


Right moving ***A*** bodies within circuit 1 deviate ***cw*** downward from the effects of its motion through the upper field of circuit 2.

Right moving ***A*** bodies within circuit 2 deviate ***ccw*** upward from the effects of its motion through the lower field of circuit 1.

Active circuits with similar direction of motion of ***A*** bodies within produce deviation forces that attract the circuits.

Fig 5b Side by side active circuits   Circuit 1 and 2 have ***A*** bodies in motion in opposite directions relative to their stationary ***B*** bodies.



Left moving ***A*** bodies within circuit 1 deviate ***cw*** upward from the effects of its motion through the upper field of circuit 2.

Right moving ***A*** bodies within circuit 2 deviate ***cw*** downward from the effects of its motion through the lower field of circuit 1.

Active circuits with opposite direction of motion of ***A*** bodies within produce deviation forces that repel the circuits.

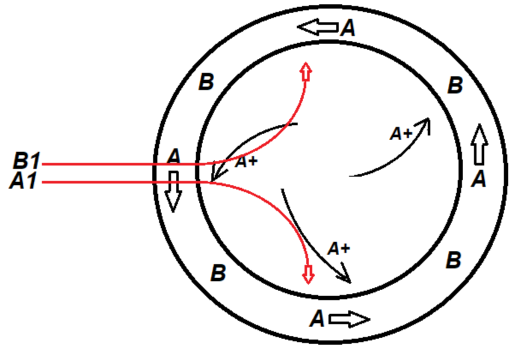
Creating a localized encircled magnetic space

Let's create a circular circuit containing stationary ***B*** bodies with ***A*** bodies in ***ccw*** motion. We have created an encircled magnetic field.

Within this field there is pressure from the moving ***A*** bodies to force rotational movement.

Motion within however will cause discrepecies in the lengths of motion segments and deviation will then occur.

Fig 6 ***A1*** and ***B1*** entering into a magnetic field.



A's motion segments are pressured to rotate ***cw***.

A deviates ***cw*** when in motion

B's motion segments are pressured to rotate ***ccw***.

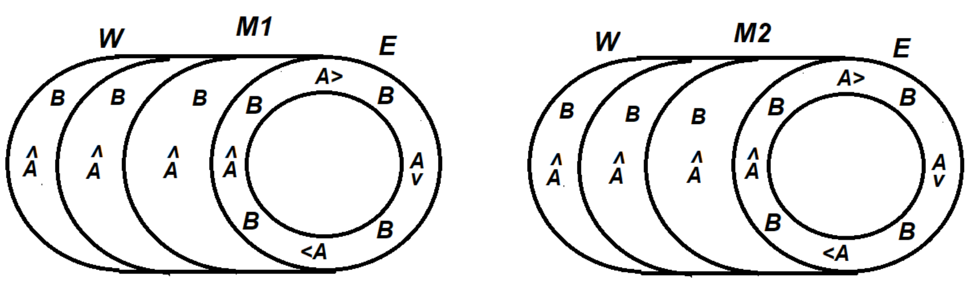
B deviates ***ccw*** when in motion.

Bodies not in motion (in relation to the B bodies) will remain at their location

Attraction and repulsion of bundled coiled circuits

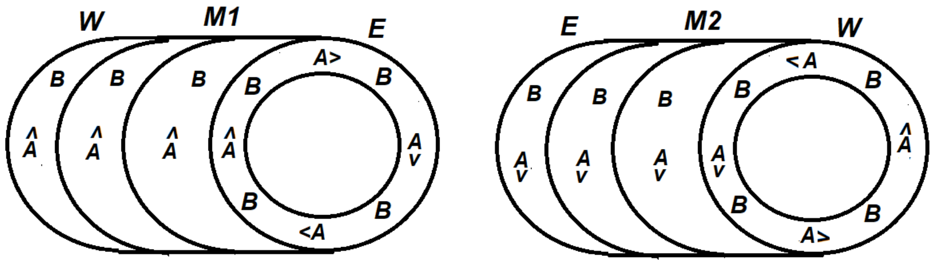
Let's wrap two circuits into two bundled cylindrical coils, ***M1*** and ***M2***. We will examine deviation forces as ***A*** moves through its coiled circuit and ***B*** stays stationary.

Fig 7a let's define an end portion by ***A*** rotation as we view it head on. ***E cw W ccw***



When ***E*** of ***M1*** meets ***W*** of ***M2***, the coiled circuits sit side by side corresponding to Fig 5a with ***A*** bodies in both coils travelling in the same direction. Same directional motion of ***A*** bodies pulls the circuits and coils together. ***E*** attracts ***W***.

Fig 7b ***E*** meets ***E*** or ***W*** meets ***W***



When ***E*** of ***M1*** meets ***E*** of ***M2***, the coiled circuits sit side by side corresponding to Fig 5b with ***A*** bodies travelling in opposite directions. Opposite directional motion of ***A*** bodies pushes the circuits and coils apart.

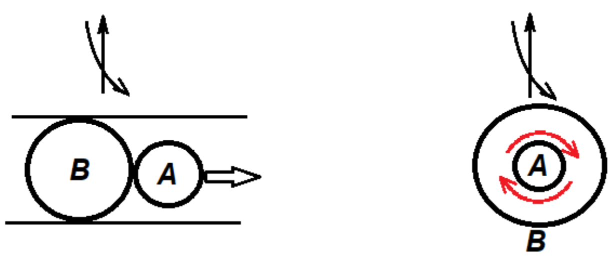
E repels ***E***. ***W*** repels ***W***

Natural Magnets

Each cylinder type coiled circuit in the above illustrations is a magnet.

A natural magnet occurs when within a combined mass of both body types, one body type is in uniform motion while the other is not.

Fig 8 Magnetic field above an active circuit and a magnetic field above a natural magnet



Each ***B*** body in the circuit can be considered to be an individual magnet.

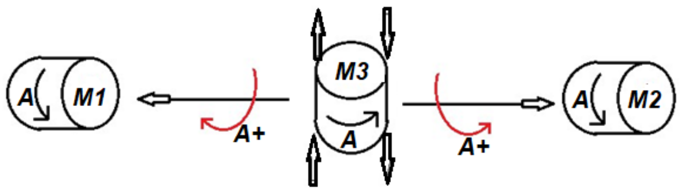
Cw rotating ***A*** bodies within the natural magnet create a magnetic field that surrounds it.

Preferred Alignment

All magnets will be illustrated in a cylindrical form.

Let all ***M*** magnets consist of stationary ***B*** bodies, with all internal ***A*** bodies in uniform and aligned motion within.

Fig 9a   The field between ***M1*** and ***M2*** cause deviation forces on ***M3***. We hold ***M1*** and ***M2*** fixed in their position. We take a viewpoint from the right. ***A+*** space curves ***ccw***.

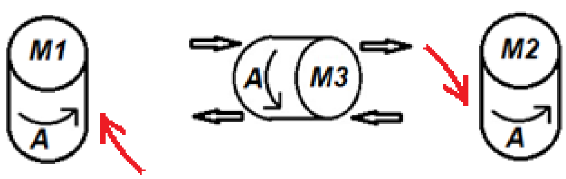


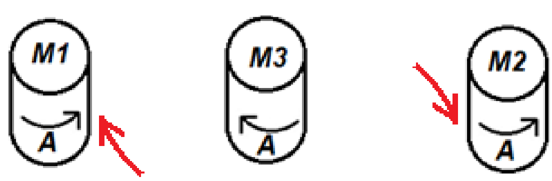
A bodies in ***M3*** in motion out from the page (left part of ***M3***) encounter a curved ***A+*** field that deviates their motion ***cw*** (upward).

A bodies in ***M3*** in motion into the page (right part of ***M3***) encounter a curved ***A+*** field that deviates their motion ***cw*** (downwards).

M3 aligns with the same direction of spin as ***M1*** and ***M2***.

Fig 9b   The field between ***M1*** and ***M2*** cause deviation forces on ***M3***. We hold ***M1*** and ***M2*** fixed in their position. We take a viewpoint from the top. ***A+*** space between ***M1*** and ***M2*** curves ***cw***.





A bodies in ***M3*** in motion out from the page (upper part of ***M3***) want to deviate ***cw*** (right) from magnetic forces from ***M1*** and ***M2***. Deviation of motion is right.

A bodies in ***M3*** in motion into the page (lower part of ***M3***) want to deviate ***cw*** (left) from magnetic charge forces from ***M1*** and ***M2***. Deviation of motion is left.

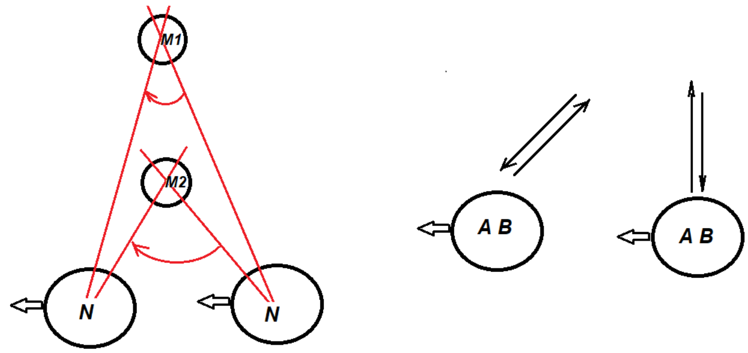
M3 aligns in opposite spin direction of ***M1*** and ***M2***.

Rotating gravitational pathways and the lateral speeds of light

We have said that a gravitational pathway is a pair of opposite directional spaces where the speeds of light are in balanced change.

Rotating gravitational pathways causes changes to direction of the speeds of light.

Fig 10   changing direction of the speeds of light   Neutral ***N*** is made of ***A*** and ***B*** bodies



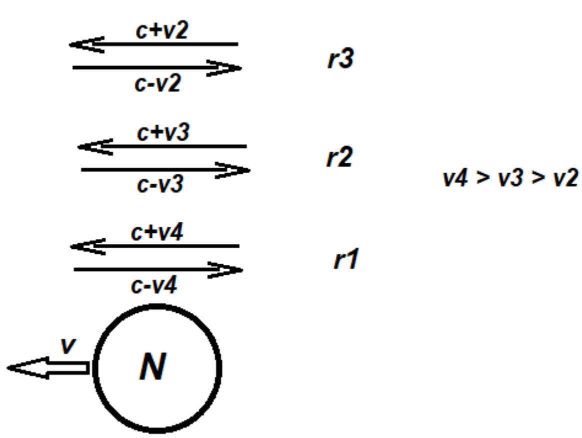
As ***N*** travels left there is a left lateral horizontal component to the speeds of light travelling down the rotating gravitational pathway. Left lateral horizontal speed is increased while right lateral horizontal speed is decreased.

If ***N***'s motion is a constant speed, the above horizontal speed at any fixed distance ***r*** above ***N*** is also constant.

The speeds of the above lateral horizontal speeds of light are determined by

1- Distance ***r*** above ***N***. In fig 10 faster rotation occurs on ***M2*** then ***M1***
2- Speed of ***N***. The faster ***N***'s motion the faster the rotatation.
3- The mass of ***N***. A faster motion of downward speed is rotated along with a slower motion of upward speed.
4- There is a graded balanced horizontal field of lateral speeds of light around a moving neutral body.

Fig 10b   Graded balanced horizontal lateral speeds of light above ***N*** in motion left

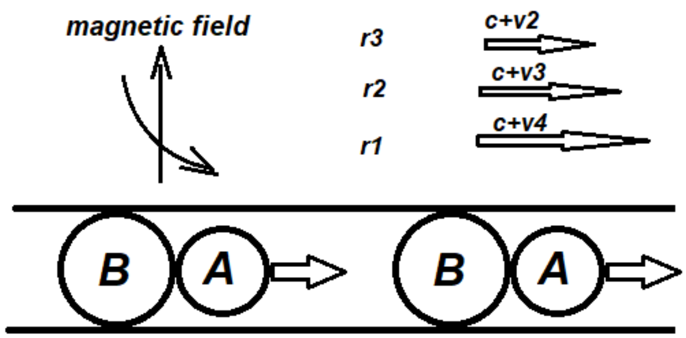


The unbalanced lateral speeds of light above an active circuit

In an active ***A*** circuit where ***A*** bodies move lateraly right, the force of movement inside the circuit is caused by an unbalanced field within which puts force on the interior bodies. If some ***A*** bodies are allowed to move and ***B*** bodies are held in place then an increasing unbalanced graded lateral field will form above the circuit.

Since the ***A*** bodies encounter resistance within, they stop accelerating and eventually settle into a constant drift velocity. The graded field will then stabilize.

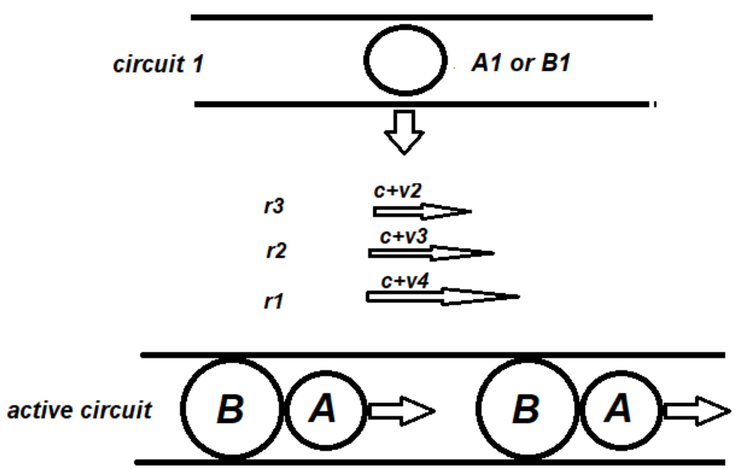
Fig 10c constant speeds of the unbalanced graded speeds of light above an active circuit.



Moving circuits towards and away from an active *A* circuit

Consider two side by side circuits. The one below is an active 2-body circuit with ***A*** bodies in motion right. The one above is a circuit with just one body inside that is not in motion. Changing speeds of light reflect changing gravitational slopes, or graded fall.

Fig 11   circuit 1 can move towards or away from an active circuit



Moving circuit 1 towards an active circuit.

1- ***A1*** in circuit 1 encounters an increasing unbalanced directional speed of light as the circuit is lowered. ***A*** accelerates in the opposite direction of an ascending (***A+***) directional space. It is pushed left.
2- ***B1*** in circuit 1 encounters an increasing unbalanced directional speed of light as the circuit is lowered. ***B*** falls and accelerates in the same direction of an ascending (***A+***) directional space. It is pulled right.
3- Increasing the rate of lowering circuit 1 increases the rate of change in speeds which increases the acceleration rate of bodies in circuit 1.

Moving circuit 1 away from an active circuit.

1- ***A1*** in circuit 1 encounters an decreasing unbalanced directional speed of light as the circuit is raised. ***A*** accelerates in the same direction of a descending (***A-***) directional space. It is pulled right.
2- ***B1*** in circuit 1 encounters an decreasing unbalanced directional speed of light as the circuit is raised. ***B*** falls and accelerates in the opposite direction of a descending (***A-***) directional space. It is pushed left.
3- Increasing the rate of raising circuit 1 increases the rate of change in speeds which increases the acceleration rate of bodies in circuit 1.

Leaving circuit 1 stationary and switching on and off the two-body circuit from non-active to active to non-active.

1- During the time it takes for the ***A*** bodies in circuit 2 to reach their drift velocity, they produce an increasing unbalanced directional speed of light in circuit 1.
2- During the time it takes for the ***A*** bodies in circuit 2 to reach zero velocity, they produce a decreasing unbalanced directional speed of light within circuit 1.

Conclusion

Gravitational Fields- fields where the gravitational pathways are sloped and balanced in their relation to the opposing speeds of light or their opposing fall rates.

Electric Field - An unbalanced gravitational field where displacement occurs because the two directional spaces of the field in line with the gravitational pathway have different fall rates (or unbalanced speeds of the two-way speeds of light). Charged forces occur in line with the motion of particle segments.

Unbalanced Rotational Fields – Charged and unbalanced gravitational fields where relative lateral motion causes rotation of the non-primary directional space leading to deviation of motion. Deviation can occur in two possible curvatures depending on the direction of lateral motion. The charged rotational force is always perpendicular to the motion of particle segments.

Magnetic Fields – An uncharged field where one directional space is held firmly in place while the other creates a rotating field. We can have non-motion in this field. Any motion only allows one direction of deviation no matter which direction is the motion.