A simple underlying picture

What parameters are different in empty space that define different fields? What has changed in space to alter it from a neutral gravitational field to an electric field?

My submission is an exercise to demonstrate and establish the changing parameters in space that differentiate the properties of space and fields.

The speed of light, its direction , linear changing speeds (balanced and unbalanced), sloped speeds (balanced and unbalanced) and curved pathways (again balanced and unbalanced) are all parameters that define the properties of their space.

My aim is to simply pursue a line of reasoning that seems to give a good insight into relationships of fields. The concept seems very intuitive and uncomplicated. I try to follow a logical pathway and invite the reader to please follow this line of reasoning and determine if the logic is sound and if this is not a new approach we should be considering.

This is an abstract concept which I feel leads to an intuitive and symmetrical interplay between charged and neutral bodies. The concept of directional space.

Directional space

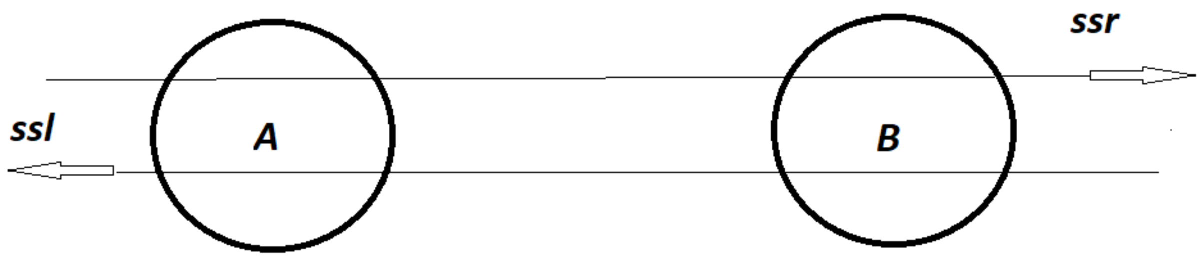
In a linear 1-dimensional space light travels at 2 speeds, ***c*** and ***–c***.

Since the property of space determines these speeds, these speeds will be called the 'the speeds of space'.

Directional space right is speed of space right (***ssr***)

Directional space left is speed of space left (***ssl***).

Fig 1



To illustrate the concept we use circular bodies ***A*** and ***B*** each made up of an internal particle that travels back and forth within. Let particles travel at the speeds of space. The mass of each body is 1.

particle segment right (***psr***) particle segment left (***psl***)

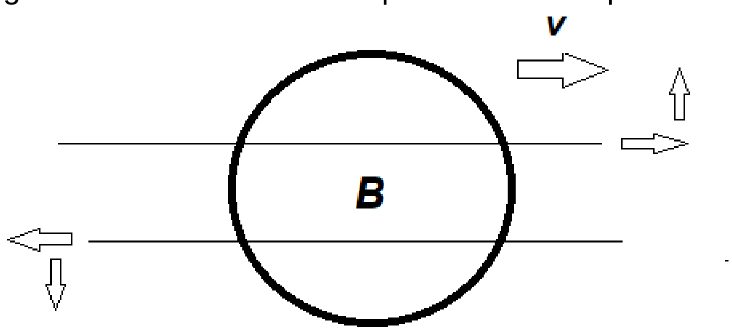
Fig 2

<u>Section 1</u> **Balanced linear changing field and fall forces**

If we initially are in the same position as ***B*** and a force in the left direction pushes us away, we will have changed our speed relationship with the speeds of space. Suppose we can view these changes.

We view ***ssr*** increasing and ***ssl*** decreasing and ***B*** accelerating away from us under no external forces.

Fig 3 Our view of ***B*** and space as we are pushed left



We observe that the rate of increase of ***ssr*** is in sync with the rate of decrease of ***ssl***. This will be called a **balanced change**.

We see ***B*** moving away from us under no external forces. Motion with no external forces is what we observe in a gravitational field.

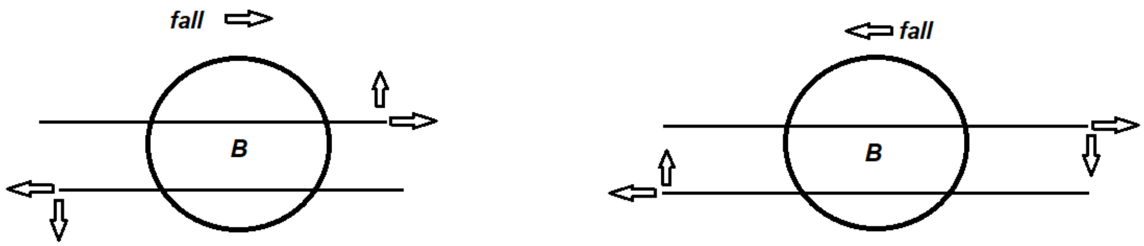
We could say that gravitational fall is the attempt of bodies to maintain its relationship with the speeds of space.

3 factors to a gravitational field.

1) external forces needed to resist fall.
2) no external forces as bodies fall.
3) changes to speeds of space create fall

Suppose we can take a field and alter the speeds of space. We remain outside the field and view the affects.

Fig 4 ***ssr*** increases ***ssl*** decreases ***ssr*** decreases ***ssl*** increases



In fig 4 we remain stationary (outside the field so as not to be influenced by it) as the speeds of space change in balance synchrony.

As ***ssr*** increases and ***ssl*** decreases ***B*** will fall right.

As ***ssr*** decreases and ***ssl*** increases ***B*** will fall left.

Fall force is proportional to the rate of change of the speeds of space. These changes are balanced.

<u>Direction of fall</u>

Increasing speed of space - Fall direction is in the direction of the speed of space

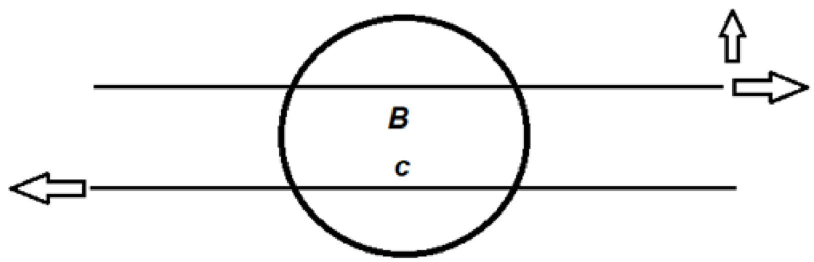
Decreasing speed of space - Fall direction is in the opposite direction of the speed of space

But what if only one directional space was to change. How does fall occur? Which space does ***B*** choose to remain in?

Section 2 Primary space and opposite viewpoint

In an unbalanced change the primary space is the space in which the body stays with.

Fig 5 Let ***ssl*** be the primary space for ***B***

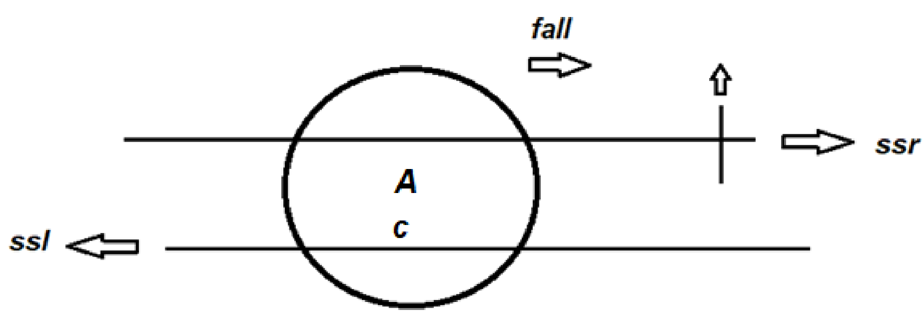


In fig 5 if ***ssl*** is the primary space then ***B*** will not fall right as ***ssr*** increases.

It is undergoing an increasing speed of its right particle segment.

Now let ***ssr*** be the primary space for ***A***. ***A*** will then retain its position in its primary space. It will fall with the change.

Fig 6



From its viewpoint ***A*** is undergoing an increase of its left particle segment.

If an unbalanced change in particle speed causes a reaction. Then the reactions of fig 5 and fig 6 are opposite and depend on choice of primary field.

Section 3 **Applied Forces**

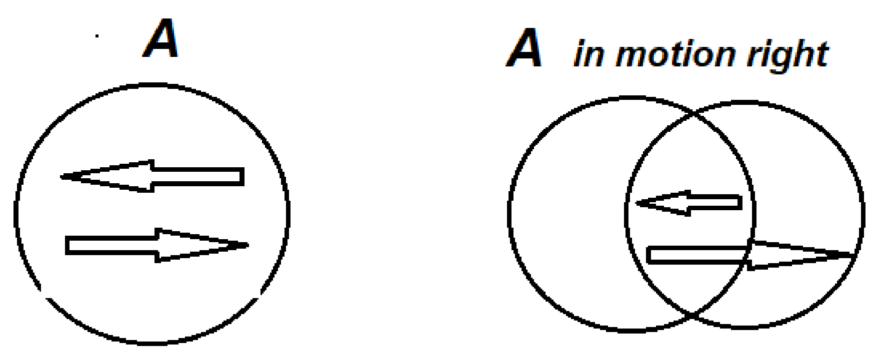
Bodies are made up of particles that travel back and forth within. Particle segment left and particle segment right are travel segments.

When mechanical forces are applied one particle travel segment will contract or expand followed after by an opposite reaction of the opposite segment.

The greater the force applied the greater the ratio is changed.

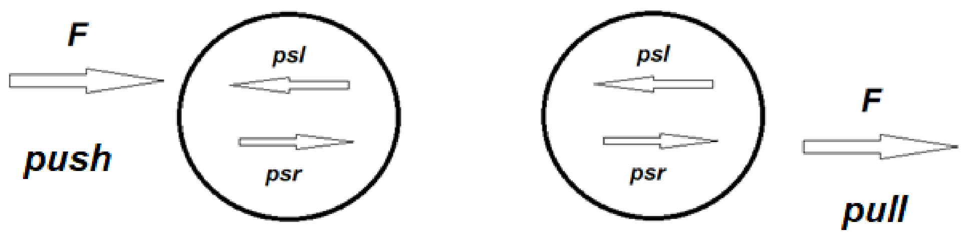
Forces to a body alter the momentum of the body by rearrangement of internal particle segments.

Fig 7



Consider Body ***A*** and we want to move it right by mechanical force. We can push or pull.

Fig 8



A push by mechanical force right will contract ***psl***. It's travel back will be expanded as a result.

A pull right will expand ***psr*** and as a result will be followed by a contraction of ***psl***.

Each force acts on one particle segment initially.

The accelerations caused by push and pull are more extreme in nature then fall.This type of acceleration causes internal stress because internal forces must be active to maintain shape and structure of the body.

In three-dimensional space the internal particle-travel in figure 8 follows a curved pathway.

When the curve is tightened (pushed right) there is a decrease in the left vector component of particle speed.

When the curve is loosened (pulled right) there is an increase in right vector component of particle speed.

Push force causes a reduction in particle speed travelling against the force leading to contraction of that particle-segment.

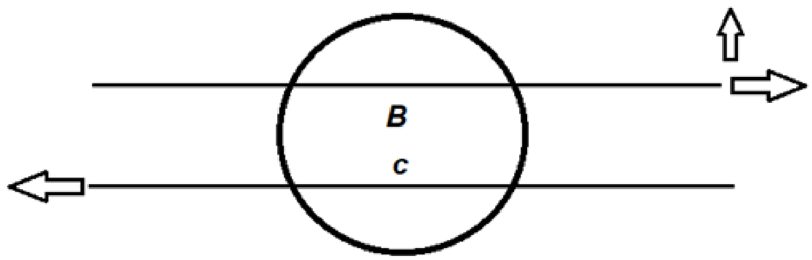
Pull force causes an increase in particle speed travelling in the direction of force leading to expansion of that particle segment.

An unbalanced change of the speeds of space seems to be very much like an applied external force.

An unbalanced change should cause expansion or contraction of particle segments.

Section 4 **Unbalanced fields and charged accelerations**

In fig 5 if ***ssl*** is the primary space then ***B*** will not fall right. It is undergoing an increasing speed of its right particle segment.

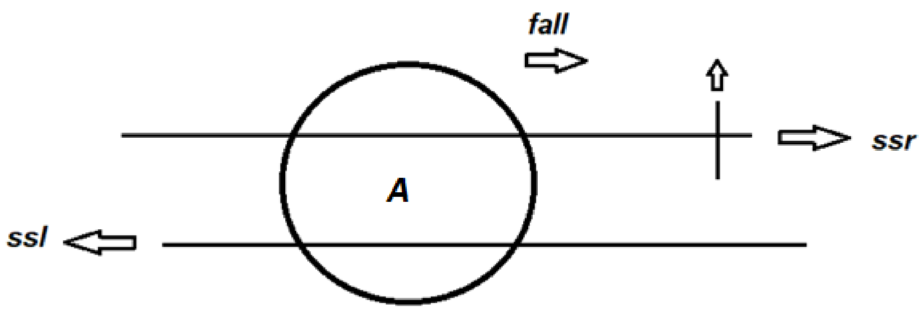


An Increasing ***ssr*** causes expansion of ***psr*** and acceleration right of body ***B***.

The acceleration is proportional to the rate of change of an increasing ***ssr***.

We will call this **charged acceleration**.

In fig 6 ***ssr*** is the primary space and ***A*** will retain its position. ***A*** will fall right.



As ***A*** falls right it detects an increasing speed of ***ssl***.

From its viewpoint it is ***ssl*** which is increasing.

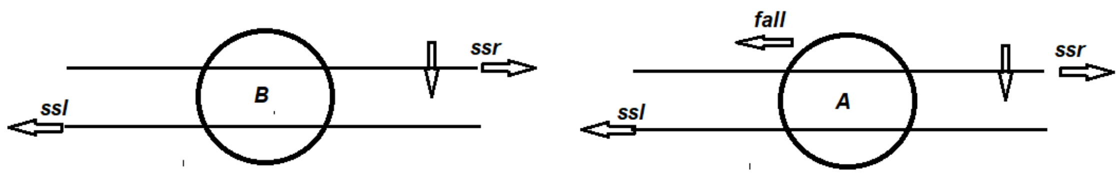
Psl will expand and ***A*** will undergo a charged acceleration to the left.

An opposite reaction to the case in figure 5.

Opposite charged accelerations occurs because of different choices of primary directional space.

Note-There is no active charged forces or stress on ***A*** on a changing balanced field. The increase in speed-right of ***A*** by fall is countered by a decreasing ***ssl*** by a balanced changing field. ***A*** does not detect the increase in ***ssl*** as it falls in a balanced field.

Fig 9 A decreasing ***ssr***



B primary space is ***ssl*** ***A*** primary space is ***ssr***

Ssr is not primary for ***B***. ***Ssr*** is decreasing causing ***psr*** to contract.

B is pushed left under a charged force. In the fall direction of a decreasing ***ssr***.

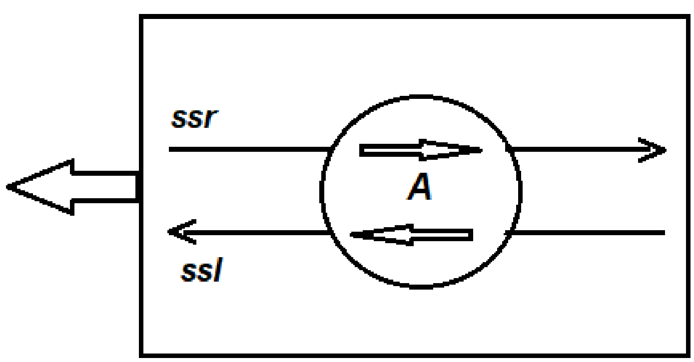
Ssr is primary for ***A***. ***A*** falls left and detects a decreasing ***ssl***.

Psl contracts and ***A*** is pushed right under a charged force. In the opposite direction of fall of a decreasing ***ssr***.

Law of charged forces - If one directional space changes and the body falls the body accelerates in the opposite direction of fall. If the body does not fall it accelerates in the same direction of fall.

Alignment of Particle segments and Detachment

Fig 10 The converse of fig 3 in section 1 Moving a section of space



Suppose we can move a section of space (a box of space) and the speeds of space maintain their relative speed relationship to the box that is moved.

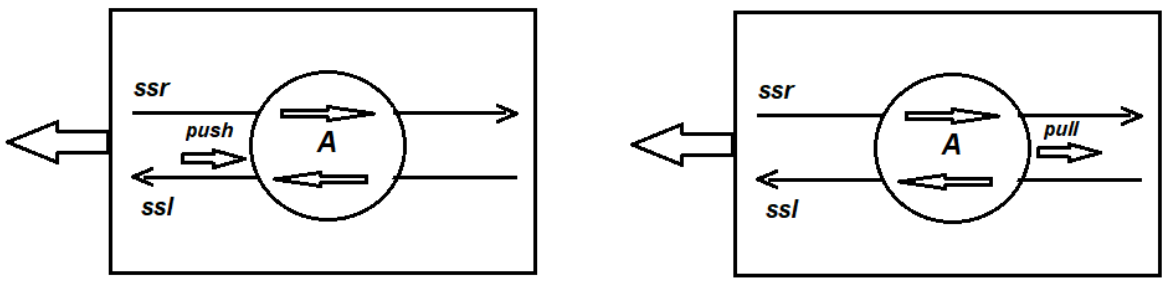
Assume the box is gradually increasing its speed as it moves left. ***A*** keeps its position in the center and maintains its relationship with the speeds of space within.

Ssr, ***ssl*** and ***A*** are all falling left. ***Ssl*** and ***ssr*** stay aligned within ***A***.

From our viewpoint we see ***ssr*** decreasing in speed, ***Ssl*** increasing in speed and ***A*** falling left under no external forces. Equivalent viewpoint as in fig 3 in section 1.

Suppose we don't want ***A*** to move left. We must apply a force to prevent it from falling left. We need to detach ***A*** from the speeds of space. We can push or pull.

Fig 11 a b



In fig 11a a push force right prevents ***psl*** from moving left causing contraction and detachment of ***psl*** from ***ssl***. It is then followed by expansion and detachment of ***psr***.

In fig 11b a pull force right prevents ***psr*** from falling left. It expands and detaches from ***ssr***. It is followed by contraction and detachment of ***psl***.

Push and Pull forces aim to misalign particle segments creating forces.

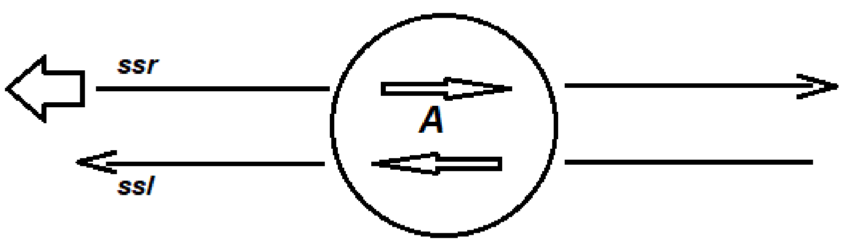
Forces cause detachment of particle segments to their directional space. When forces are removed reattachment occurs.

Forces on a body are felt when misalignment occurs.

<u>Unbalanced pull of the speeds of space, misalignment and primary attachment</u>

Now suppose we only pull one speed of space.

Fig 12



Ssr is pulled left. A misalignment is being created which should lead to forces.

Moving ***ssr*** left is equivalent to us viewing a decreasing speed of ***ssr***.

Unbalanced changes to the speeds of space cause misalignment and forces.

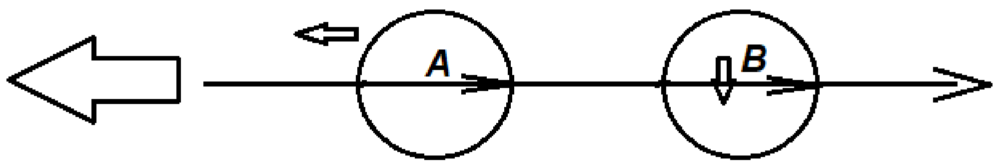
But all motion is relative and from a different viewpoint ***A*** could say that ***ssl*** is being pulled right.

A is either pushed left or pushed right depending on which speed of space is primary.

If ***psr*** is primary to ***ssr*** then it moves with ***ssr*** as ***ssr*** is changed. ***Psr*** does not detach. ***A*** detects a change on the opposite segment. The opposite segment contracts and detaches.

If ***psr*** is not primary then ***psr*** is undergoing a true decrease in its speed. It contracts and detaches.

Fig 13 ***ssr is primary for A*** ***not primary for B***



There is a charged force right on ***A*** and a charged force left on ***B***.

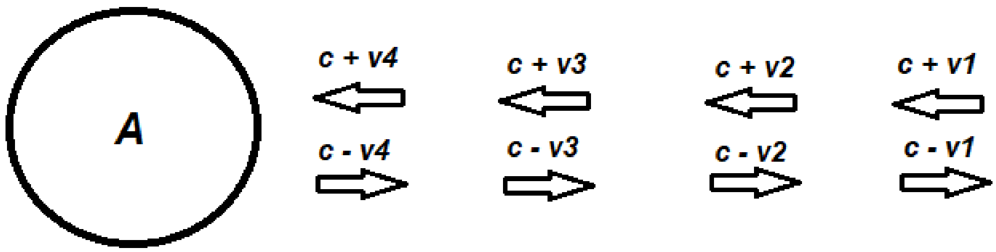
Primary choice is dependent on particle segments maintaining attachment to a changing speed of a directional space.

Section 5 **Sloped space**

How is a gravitational field around ***A*** in balanced change and causing a fall force?

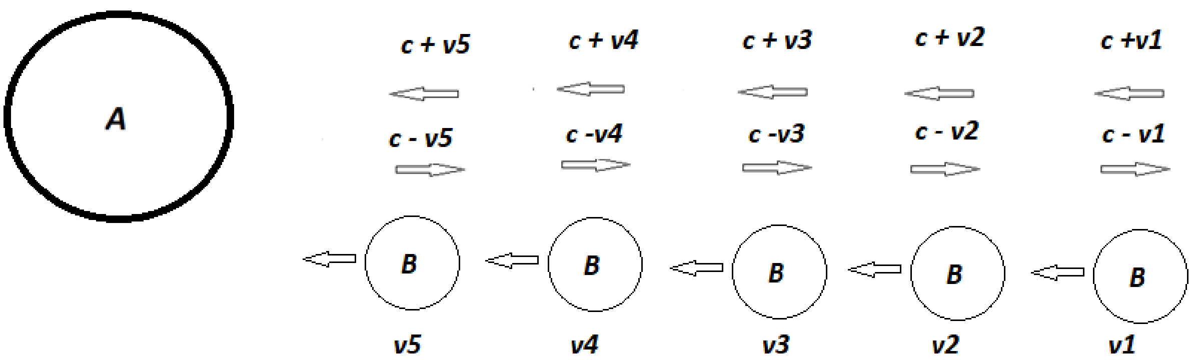
A changing balanced field can be a sloped field.

Fig 10



To maintain its position a body to the right of ***A*** will fall left and increase its speed in an attempt to maintain its speed relationship with the speeds of space.

Fig 11 ***Speed Reference (SR). SR*** is the speed and location at which the falling body matches the changes to the speeds of space.



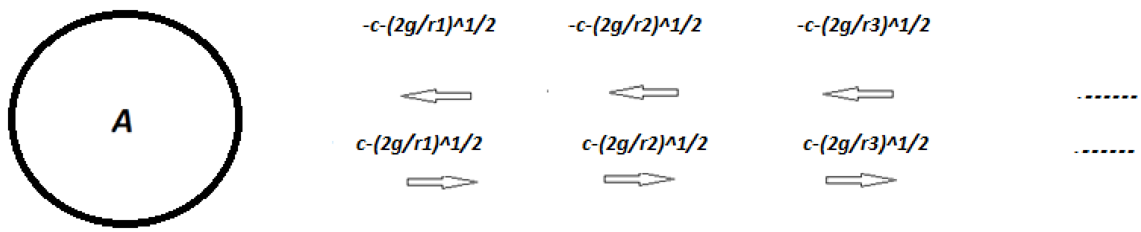
The speed of space outwards from a body is ascending outwards but its gravitational pull is inwards.

The speed of space inwards ascends inward and its gravitational pull is also inwards.

What is ***v***?

Gravitational effect continues to r = infinity. Theoretically a body at infinity with speed 0 will eventually fall and hit the surface of a mass at the fall escape velocity. ***v*** then is $(2gm/r)^{1/2}$. (let mass equal 1 for ***A***)

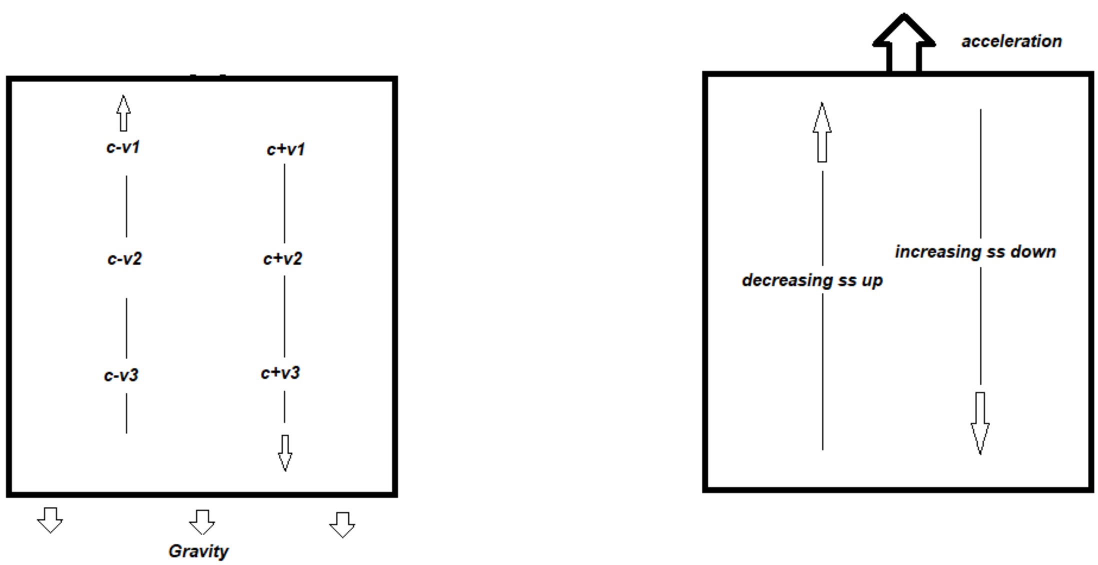
Fig 12



Since all changes within this field are balanced there is no charged forces.

The fall of ***SR*** determines the gravitational pull (fall rate). Acceleration of bodies at any distance ***r*** from ***A*** is $-g/r^2$ inwards. All bodies in this field no matter what speed or direction they are travelling will be affected by a fall force determined by ***SR***.

Fig 13 Elevator thought experiment



In both cases from the viewpoint of the internal observer fall force is downwards.

In elevator left the fall rate is determined by the slopes of the speeds of space, ***SR***. In elevator right the fall rate is determined by the acceleration rate of the elevator.

Section 6 **Splitting of gravitational space and unbalanced sloped fields**

Gravitational forces from bodies pull on inward bound directional space and outward bound. How do we get an unbalanced sloped field?

Suppose there were two types of bodies. One pulls on inward bound only. The other on outward bound.

Fig 1

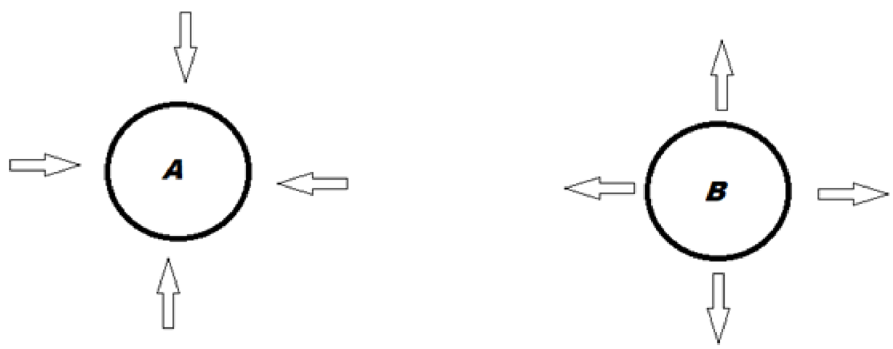
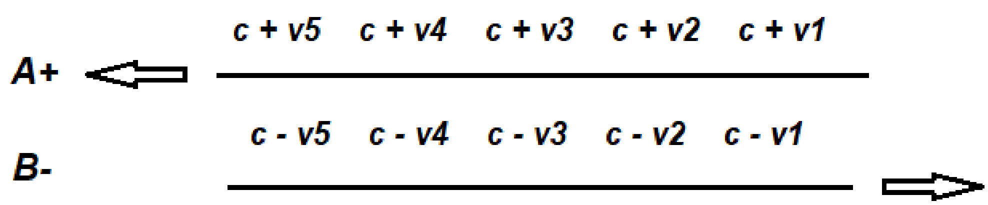


Fig 2 Characteristics of slopes



A slope (***A+***) Increases the speed of space. It is an ascending field and increases its pulling strength (slope) as it ascends. Its fall slope is in the direction of ascending speed of space. It pulls from the front.

B slope (***B-***) Decreases the speed of space. It is also an ascending field that decreases its pulling strength (slope) as it ascends. Its fall slope is in the opposite direction of its ascending directional space. It pulls from behind.

Unbalanced sloped fields are similar to unbalanced changing linear fields. They are charged fields.

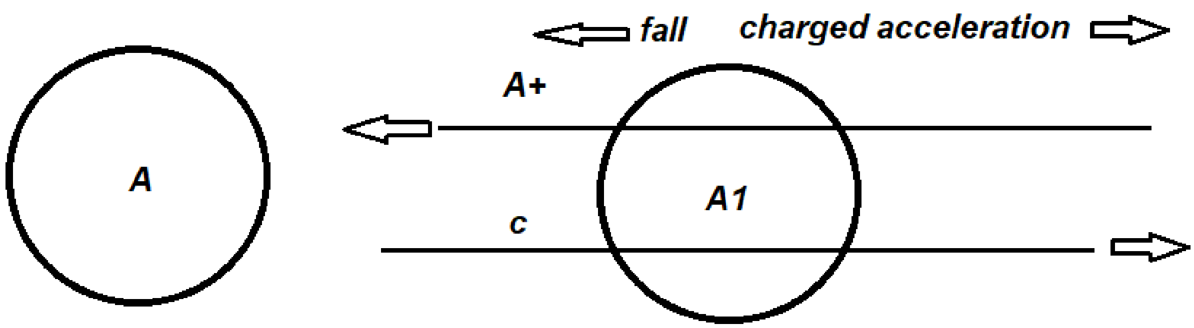
Charged slope fields

A slope is designated as ***A+*** ***B*** slope is ***B-***

Let ***B- slope*** be ***B's*** primary field. Let ***A+ slope*** be ***A's*** primary field.

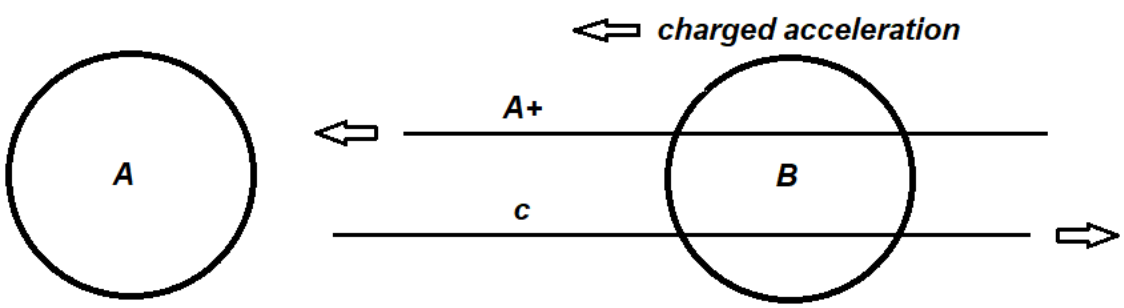
We'll consider only fields on the right

Fig 3 ***A1 in A's field. A*** is fixed



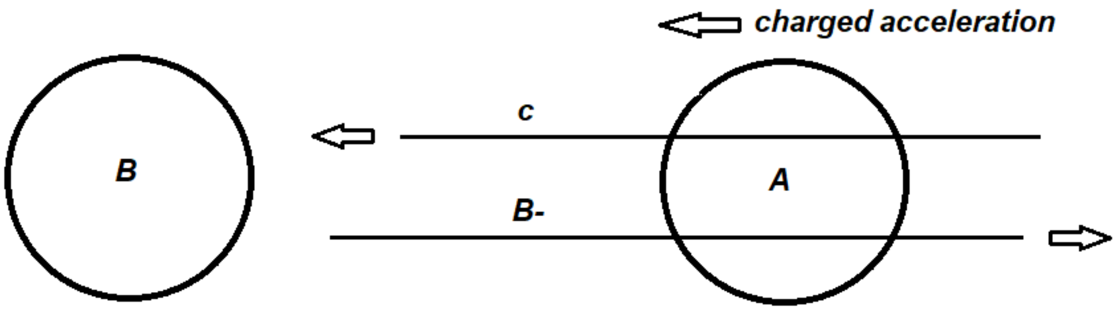
Ssl is sloped left. It is a primary slope for ***A1***. ***A1*** falls left along its primary slope. It detects an increasing ***ssr*** as it falls. ***Psr*** expands and ***A*** is pulled by a charged force to the right. In the opposite direction of an ***A+*** fall slope. A primary slope affects the segment on the opposite side.

Fig 4 ***B*** in ***A's*** field



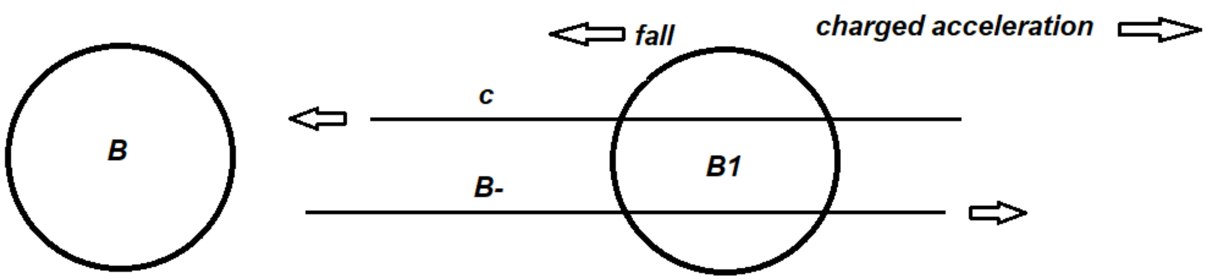
There is no fall. ***B's psl*** is expanded by an ***A+*** directional space (not primary) and ***B*** is pulled into ***A*** by a charged force. In the direction of an ***A+*** fall slope. A non-primary slope affects particle segment of the same side.

Fig 5 An ***A*** body in ***B***'s field



A does not fall. ***B-*** space from ***B*** contracts ***psr*** of ***A***. ***A*** is pushed into ***B*** by a charged force, in the direction of a ***B***- fall slope. Non-primary slope affected particle segment directly.

Fig 6 A ***B1*** body in a ***B*** field

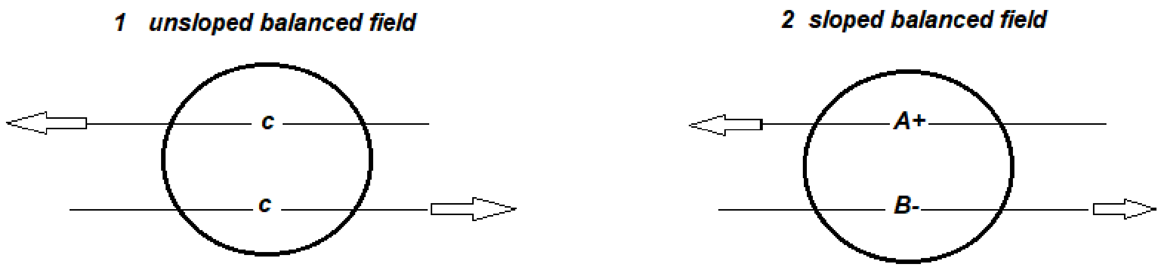


B1 falls along The ***B-*** slope. It detects a decreasing ***ssl***. ***Psl*** of ***B1*** contracts and ***B1*** is pushed away from ***B*** to the right. In the opposite direction of a ***B-*** fall slope. The primary slope affected particle segment of the opposite side.

Stationary bodies

Balanced fields are neutral fields

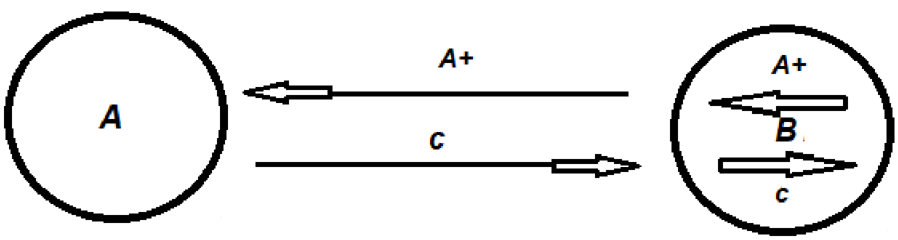
Fig 6



1 from fig 6 is a balanced flat field. **2** is a balanced sloped field.

Unbalanced changes to these configurations will lead to expansion or contraction of particle travel segments. But because of differences in choice of primary field. Body ***A*** will see things differently than body ***B***.

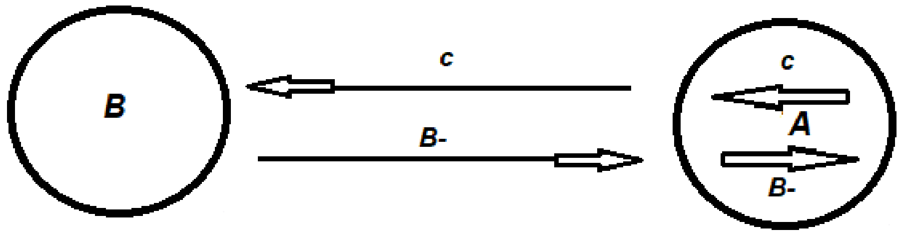
Fig 7 ***B*** in a flat field and the addition of ***A*** to the left. No fall force is present.



Ssl is not primary for ***B***. There is no fall force.

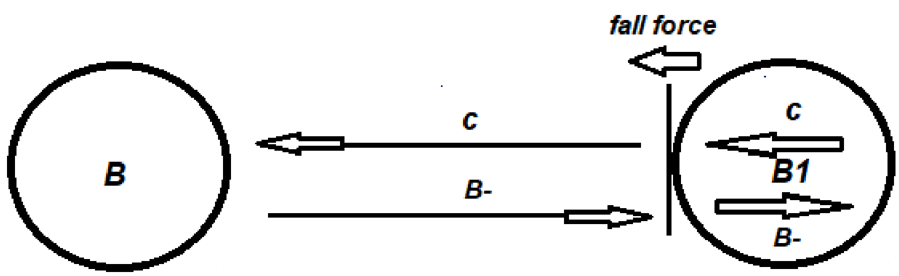
From the view of its primary field ***B*** has expierenced a change. It's **psl** which is not primary has increased in slope from ***c*** to ***A+.*** Its particle travel left is accelerating causing expansion and a charged force left. Expansion of ***psl*** is the initiating move. ***B*** is pulled in the direction of fall of an ascending ***A+*** field.

Fig 8 ***A*** in a flat field and the addition of ***B*** on the left. No fall force is present.



Ssr is not primary for ***A***. Its ***psr*** slope has changed from ***c*** to ***B-***. ***A***'s ***psr*** is pulled back and slowed by ***B's*** outbound ***ssr***. ***Psr*** of ***A*** contracts and ***A*** is pushed toward ***B***. ***A*** is pushed in the direction of fall of an ascending ***B-*** field.

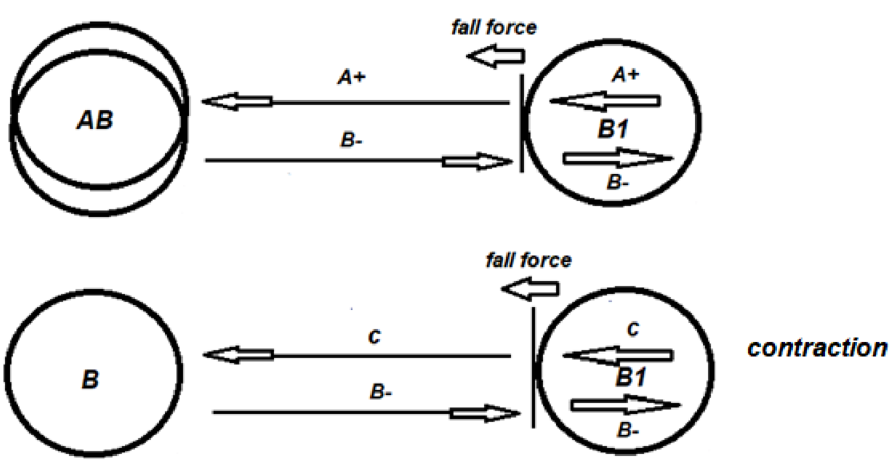
Fig 9 ***B1*** in a flat field and the addition of ***B*** to the left. ***B1*** is prevented from falling.



Ssr is the altered space but it is a primary space of ***B1***. In the previous fields in fig 7 and 8, the non-primary field was altered from a balanced flat field.

Consider a balanced sloped field. And the removal of ***A*** from the source of the field. ***B1*** is not allowed to fall.

Fig 10

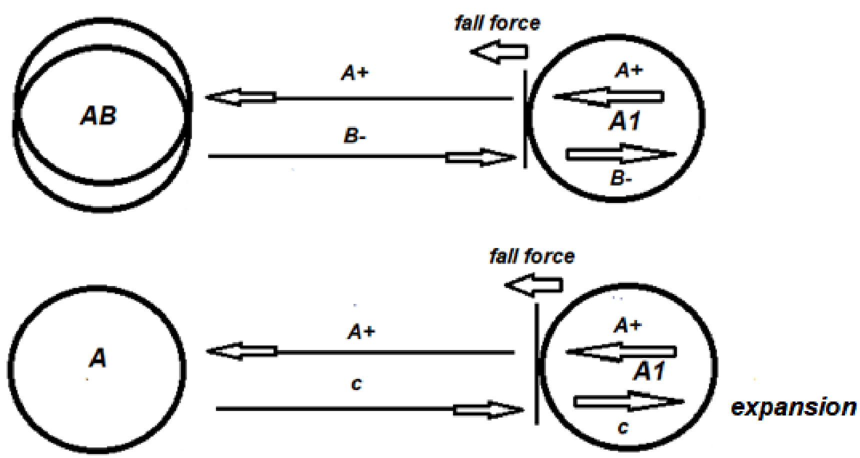


From a balanced sloped field ***B1***'s non-primary particle segment has been altered from ***A+*** to ***c***.

If an *A+* slope expands a non-primary particle travel segment, then a removal of an *A+* slope from a non-primary particle segment should contract it.

Because ***ssr*** is a primary slope it affects particle segment of the other side. ***Psl*** contracts and ***B1*** is pushed right away from ***B*** in the opposite direction of fall of an ascending ***B-*** field.

Fig 11 ***A1*** in a balanced sloped field and the removal of ***B*** from the source



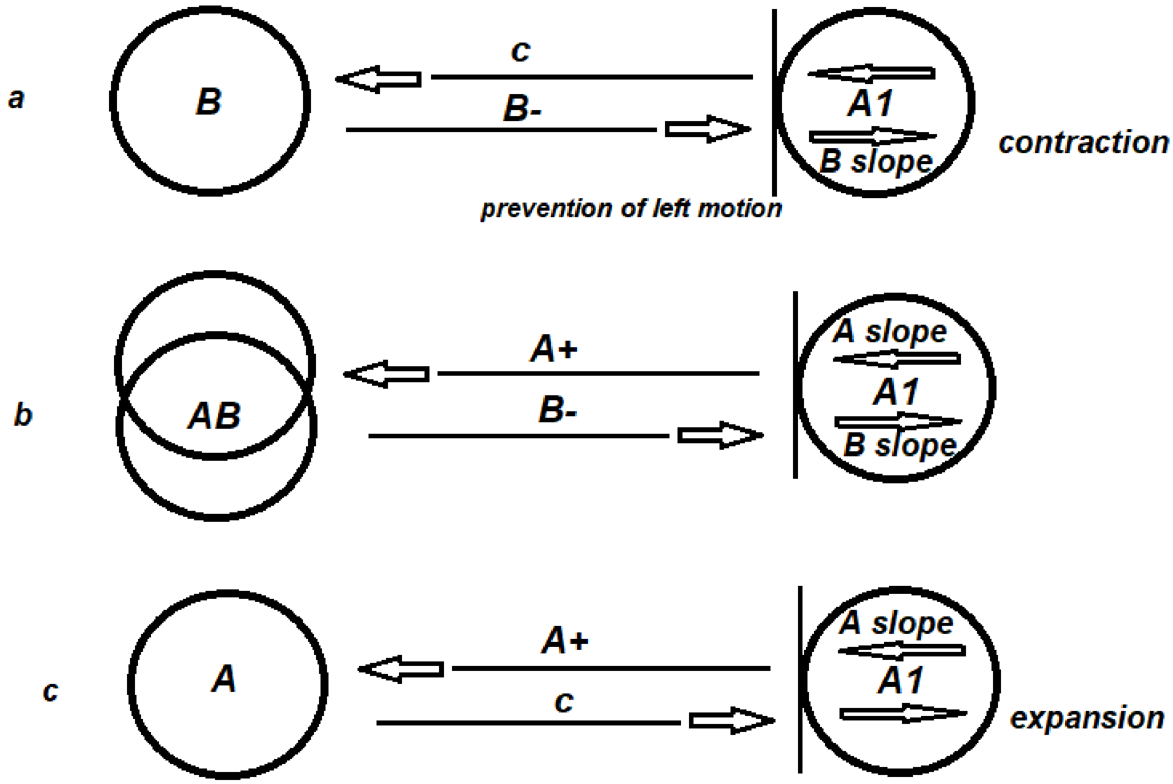
From a balanced sloped field ***A1***'s non-primary particle segment has been altered from ***B-*** to ***c***.

If a *B-* slope contracts a non-primary particle travel segment, then a removal of a *B-* slope from a non-primary particle segment should expand it.

A1 is pulled away from ***A*** by a charged force, in the opposite direction of an ascending ***A+*** field.

Changing fields with ***A1*** to the right.

Fig 12



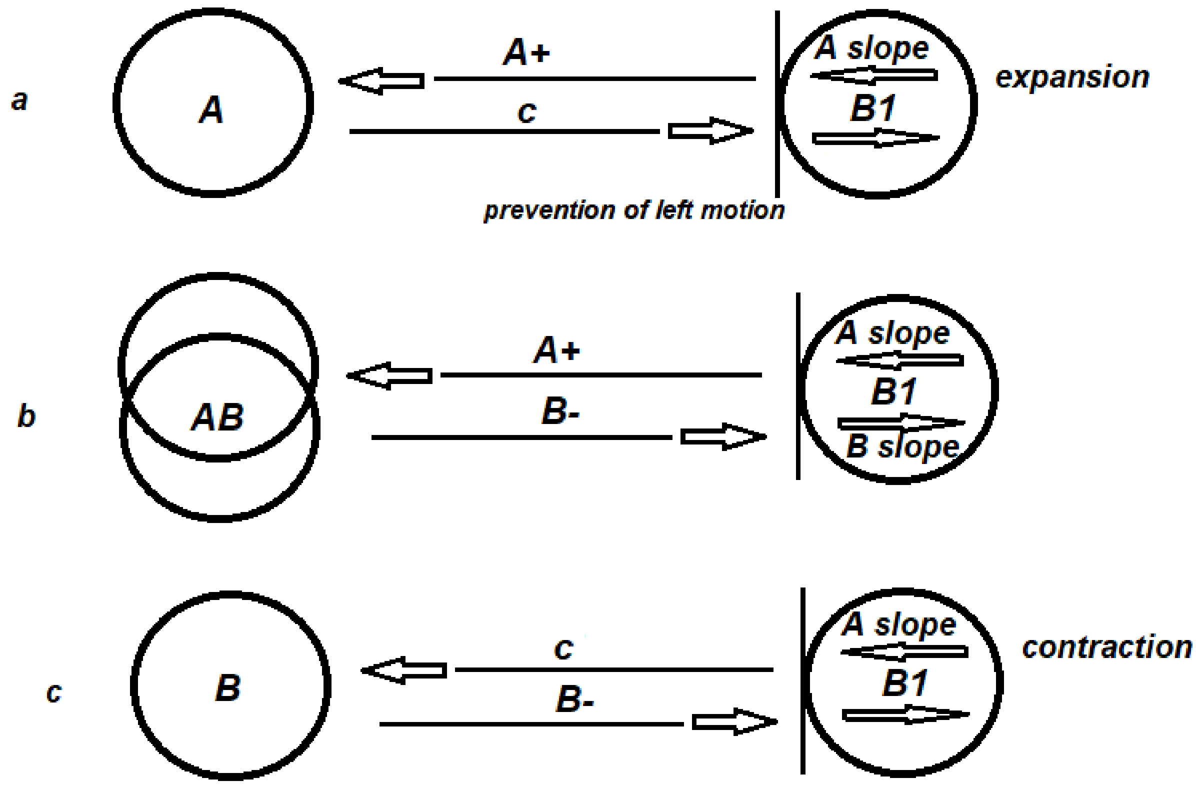
In fig 12a the addition of a non-primary ***B- slope*** to the left of ***A1*** in a flat balanced field causes contraction of ***psr*** of ***A1***.(charge force is left)

12b the addition ***A*** to the left adds a primary directional space that affects particle segment on the opposite side. ***Psr*** of ***A1*** is expanded which cancels its contraction and ***A1*** is in a sloped balanced field with no charged forces.

In 12c the removal of a non-primary ***B-*** slope to the left of ***A1*** in a sloped balanced field removes contraction which causes expansion of ***psr*** of ***A1***.(charge force is right)

Changing fields with ***B1*** on the right.

Fig 13



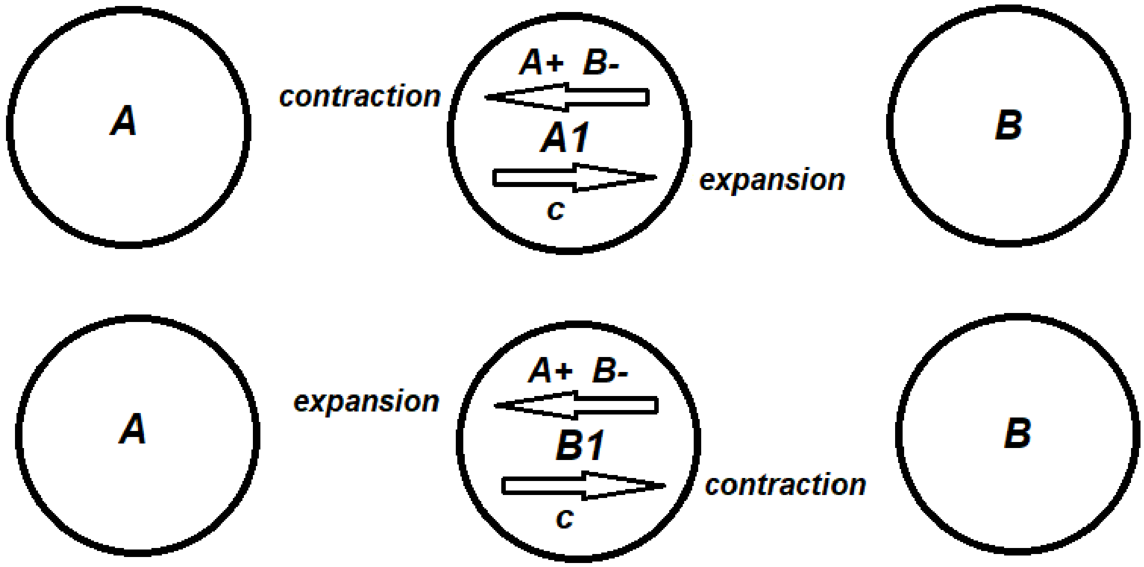
In fig 13a the addition of a non-primary ***A+ slope*** to the left of ***B1*** in a flat balanced field causes expansion of ***psl*** of ***B1***.(charge force is left)

In 13b the addition of ***B*** to the left adds a primary directional space that affects particle segment on the opposite side. ***Psl*** of ***A1*** is contracted which cancels its expansion and ***B1*** is in a sloped balanced field with no charged forces.

In 13c the removal of a non-primary ***A+*** slope to the left of ***B1*** in a sloped balanced field removes expansion and causes contraction of ***psl*** of ***A1***.(charge force is right)

The forces on bodies in a field is not dependent on their motion.

Fig 14 Fields with ***A1*** and ***B1*** in the middle



In fig 14 ***ssl*** is altered by both ***A*** and ***B***.

Psl of ***A1*** falls left causing expansion of ***psr***. ***Psl*** is also being contracted as it falls.

A1 is being pulled right by ***A*** and pushed right by ***B***.

Psl of ***B1*** falls right causing contraction of ***psr***. ***Psl*** is also being expanded as it falls.

B1 is being pulled left by ***A*** and pushed left by ***B***.

Bodies must be able to distinguish each slope independently from the one directional space. An ***A*** body makes an ***A+*** type change to a field. A **B** body makes a ***B-*** type change to the field. Both changes are detectable and give rise to their individual unique affects.

When a slope is introduced to a body in a field it will affect the body in the same manner no matter what field the body is in.

When an ***A+*** type change and a ***B-*** type change is made to one directional space we will call this a stretched directional space. (An example of this in a linear field is shown in part 2)

Summary of charged forces

An ***A+*** field from an ***A*** body expands inward bound particle segment of a ***B*** body in its field. It pulls ***B*** in.

Because of fall an ***A+*** field from an ***A*** body expands outward bound particle segment of an ***A*** body in its field. It pulls ***A*** away.

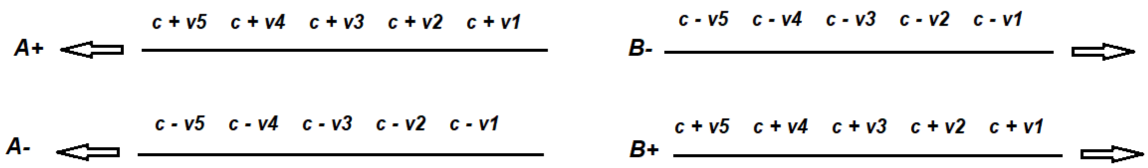
A ***B-*** field from a ***B*** body contracts outward bound particle segment of an ***A*** body in its field. It pushes ***A*** in.

Because of fall a ***B-*** field from a ***B*** body contracts inbound particle segment of a ***B*** body in its field. It pushes ***B*** away.

Charged forces ***A*** repels ***A*** ***B*** repels ***B*** ***A*** attracts ***B***

<u>Section 7</u> *A*nti bodies

Fig 1 anti slopes



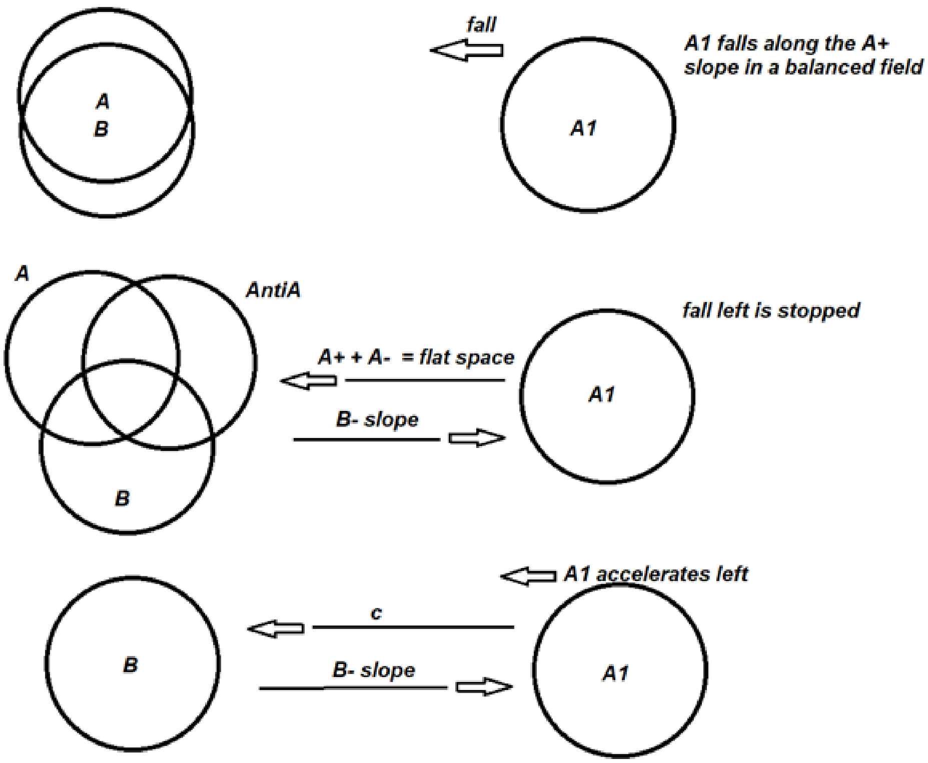
We can eliminate slopes by adding anti slopes that flatten the field. In fig 1 an ***A-*** slope will flatten an ***A+*** slope. A ***B+*** slope will flatten a ***B-*** slope.

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

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

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

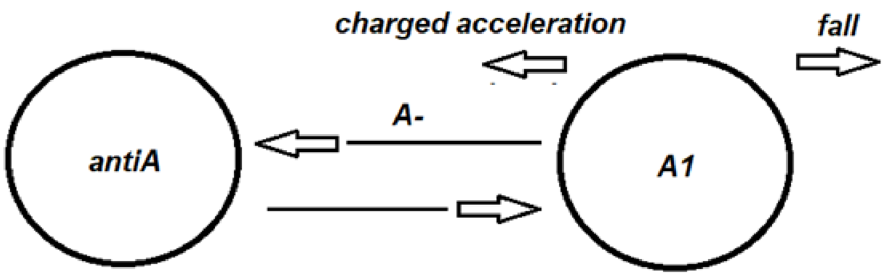
Fig 2 Removing ***A*** from the source of a balanced sloped field by adding an a***ntiA***. ***A1*** in the field to the right.



Adding an ***antiA*** body to an ***A*** body annihilates them both and flattens their directional inbound space. Fall left was cancelled out. Hence adding ***antiA*** to the left of ***A1*** causes fall right of an ***A*** body and acceleration left.

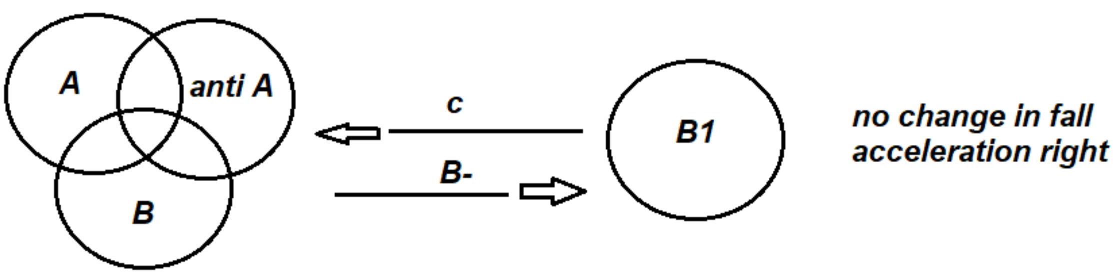
A1 originally was in a balanced sloped field. The introduction of ***antiA*** to the left of ***A1*** will have the same result when ***A1*** is in a flat field.

Fig 3



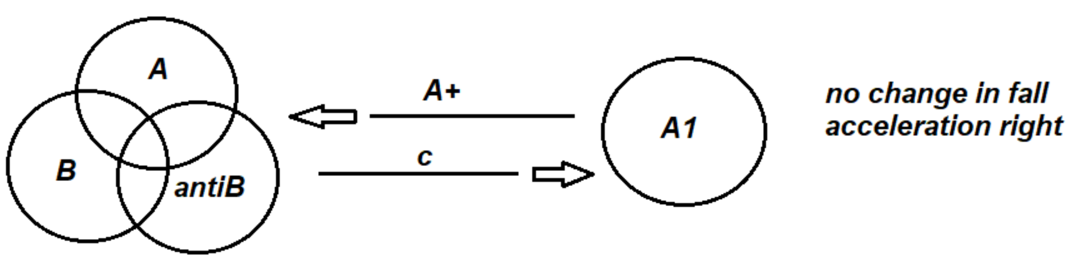
A1 undergoes fall right and charged acceleration left with the introduction of ***antiA*** left. It pushes ***A1*** inward. They will annialate each other.

Fig 4



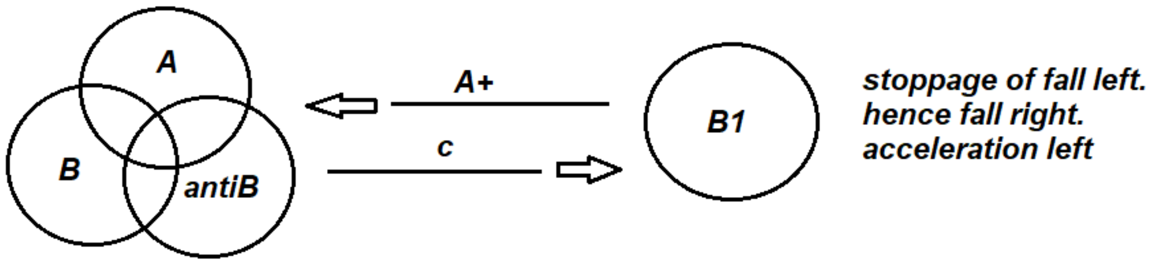
From fig 4- introduction of ***antiA*** to the left of ***B1*** causes no change in fall and charged acelleration right of ***B1***. ***AntiA*** pushes ***B1*** away.

Fig 5



From fig 5 the introduction of ***antiB*** to the left of ***A1*** causes no change in fall and charged acceleration right on ***A1***. ***AntiB*** pulls ***A1*** away.

Fig 6



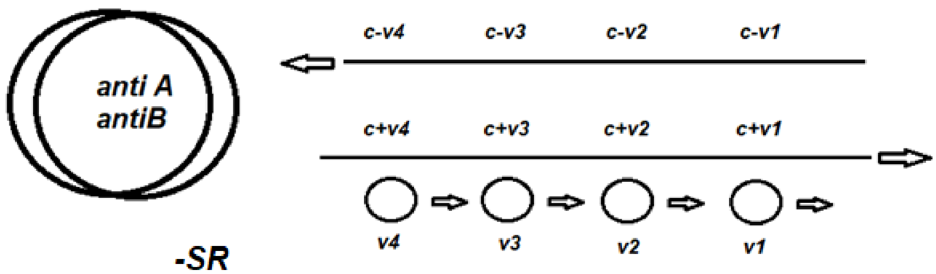
From fig 6 the introduction of ***antiB*** to the left of ***B1*** causes fall right (cancelling fall left) and acceleration left of ***B1***. ***AntiB*** pulls ***B1*** in.

<u>Anti Bodies and negative ***SR (-SR)***</u>

Let an ***A*** body with an ***A-*** field be denoted ***antiA***

Let a ***B*** body with a ***B+*** field be denoted ***antiB***

Fig 7 Consider ***-SR*** field of ***antiAB***



v is the gravitational escape velocity

-Sr in this field is travelling right but it is deaccelerating. Fall acceleration is left.

Fall direction of inbound ***A-*** space is inward.

Fall direction of outbound ***B+*** space is also inward.

Antibodies undergo the same forces in the same fashion with other antibodies as do bodies with bodies.

An ***A-*** field from an ***antiA*** body expands inward bound particle segment of an ***antiB*** body in its field. It pulls ***antiB*** in.

Because of fall an ***A-*** field from an ***antiA*** body expands outward bound particle segment of an ***antiA*** body in its field. It pulls ***antiA*** away.

A ***B+*** field from an ***antiB*** body contracts outward bound particle segment of an ***antiA*** body in its field. It pushes ***antiA*** in.

Because of fall a ***B+*** field from an ***antiB*** body contracts inbound particle segment of an ***antiB*** body in its field. It pushes ***antiB*** away.

Charged forces ***antiA*** repels ***antiA*** ***antiB*** repels ***antiB*** ***antiA*** attracts ***antiB***

But forces are reversed when body meets antibody.

Relationship of forces to paired bodies

AB AB	fall attraction	no charge forces
A A	fall attraction	charged repulsion
B B	fall attraction	charged repulsion
A B	no fall	charged attraction

antiAB antiAB	fall attraction	no charge forces
antiA antiA	fall attraction	charged repulsion
antiB antiB	fall attraction	charged repulsion
antiA antiB	no fall	charged attraction

AB antiAB	fall repulsion	no charge forces
A antiA	fall repulsion	charged attraction
B antiB	fall repulsion	charged attraction
A antiB	no fall	charged repulsion
B antiA	no fall	charged repulsion

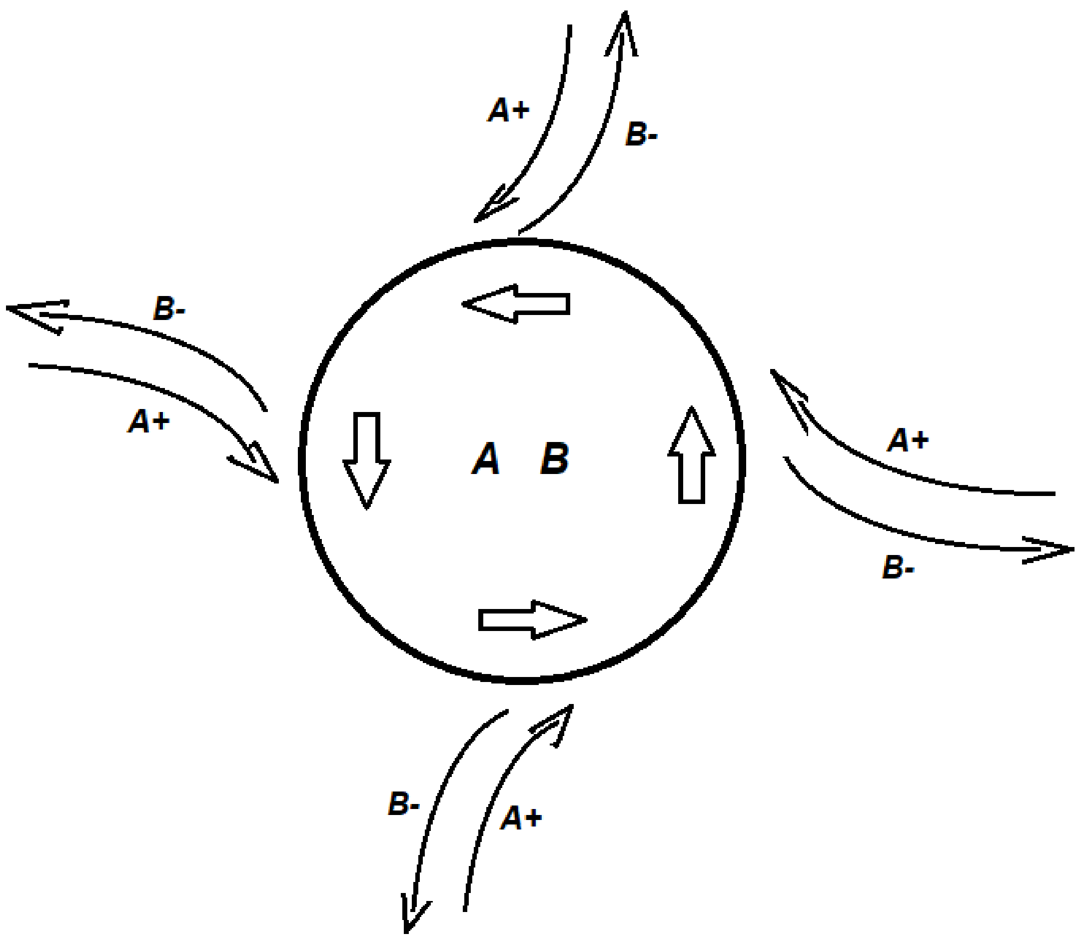
End of part 1

<u>Part 2 Section 8</u> **Creating circular force fields**

Consider a spinning ***A*** body and ***B*** body. How is peripheral space affected?

B bodies pull outbound speed of space from behind, ***A*** bodies pull inbound speed of space from the front. Do moving bodies curve the speeds of space? We will make these assumptions and carry on to see where they will lead.

Fig 1



Outward speed of space leaving perpendicular from ***AB*** is skewed left.

Inward speed of space coming in perpendicular to ***AB*** is also skewed left.

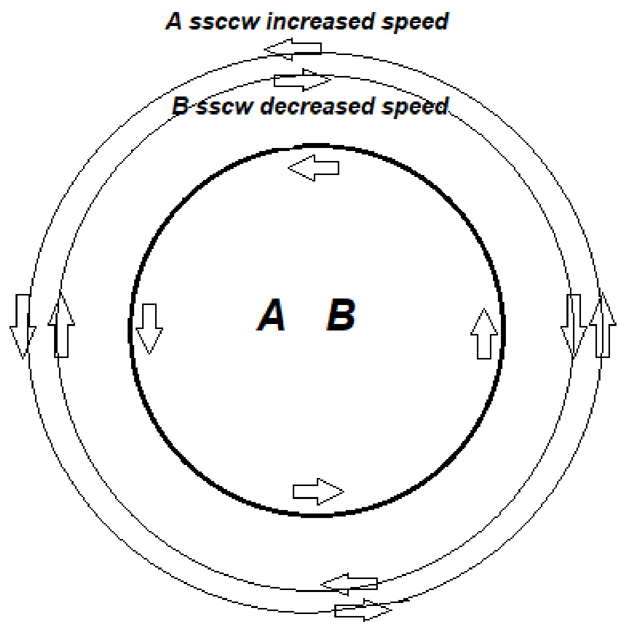
A vector speed component is added to circular speed of space circling ***AB***.

There are two circular directional speeds. Speed of space ***ccw*** (***ssccw***) and speed of space ***cw*** (***sscw***).

When body ***AB***'s spin increases ***ccw***, ***A*** space by forward-pull forces an increase to ***ssccw***. And ***B*** space rear-pull forces a decrease in ***sscw*** speed. There are two distinct pulls.

A increases ***ssccw*** by pull from the front and ***B*** decreases ***sscw*** by pull from behind.

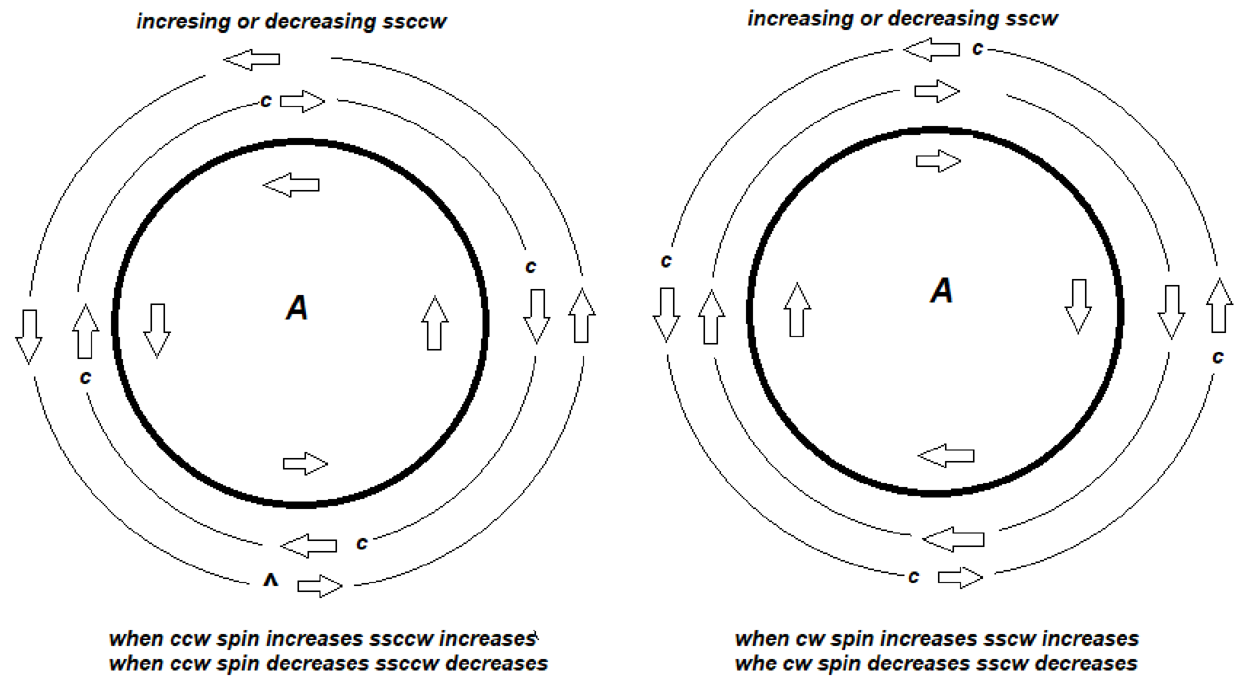
Fig 2



Assume a constant rate of spin of ***AB ccw***. The circular speeds of space are constant. But If ***AB*** increases in ***ccw*** spin, ***A's ccw*** circular speed of space will increase while **B's cw** circular speed of space will decrease. This is a balanced change. Is a circular gravitational field created when changes to spin rate occur?

A body in spin. If there was a circular tube that surrounded the ***A*** body that contained free ***A*** bodies only or free ***B*** bodies only, they would be put under charged forces when changes to spin rate occurs.

Fig 3 Spinning unbalanced charged bodies.



<u>An increasing ***ccw*** spin by an ***A*** body</u>

–***A*** bodies will fall ***ccw*** and accelerate ***cw*** –***B*** bodies accelerate ***ccw***

<u>A decreasing ***ccw*** spin</u>

– ***A*** bodies will fall ***cw*** and accelerate ***ccw*** -***B*** bodies accelerate ***cw***

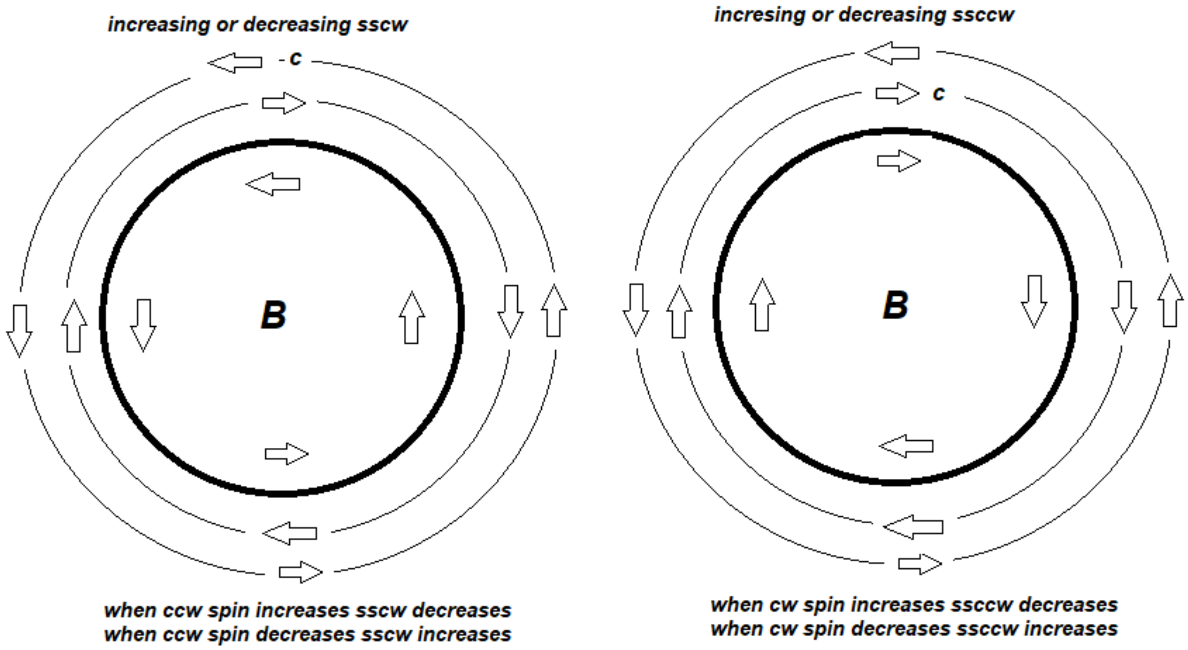
<u>An increasing ***cw*** spin</u>

– ***A*** bodies will fall ***cw*** and accelerate ***ccw*** -***B*** bodies accelerate ***cw***

<u>A decreasing ***cw*** spin</u>

– ***A*** bodies will fall ***ccw*** accelerate ***cw*** -***B*** bodies accelerate ***ccw***

Fig 4 ***B*** body in spin



B body in spin

An increasing ***ccw*** spin ***sscw*** decreases

A bodies accelerate ***ccw*** ***B*** bodies will fall ***ccw*** and accelerate ***cw***

A decreasing ***ccw*** spin ***sscw*** increases

A bodies accelerate ***cw*** ***B*** bodies will fall ***cw*** and accelerate ***ccw***

An increasing ***cw*** spin ***ssccw*** decreases

A bodies accelerate ***cw*** ***B*** bodies will fall ***cw*** and accelerate ***ccw***

A decreasing ***cw*** spin ***ssccw*** increases

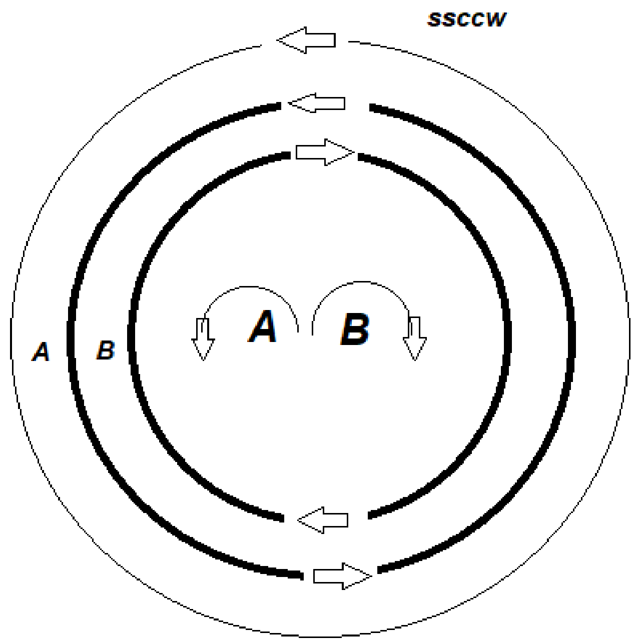
A bodies accelerate ***ccw*** ***B*** bodies fall ***ccw*** and accelerate ***cw***

Note; speeds of space are also affected by mass of the spinning body and proximity.
Changing proximity of a uniform spinning body will cause charged fields.

Stretched field

If a combined ***A-B*** body have opposite spins and their changes are opposite they will create a stretched field when increasing (or compressed field when decreasing).

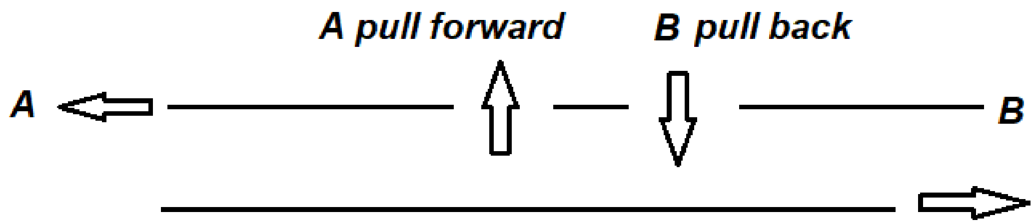
Fig 5



In fig 5 assume ***A*** and ***B*** always increase and decrease their spin in opposite direction.

If ***A*** increases its spin ***ccw*** and ***B cw***, the speed of space ***ccw*** is being pulled forward from the front by ***A*** and pulled back from behind by ***B***. There is no net increase in speed but the field is under stress because two forces are active in trying to change the speeds of space in opposite directions.

Fig 6 A stretched directional space (section of space from the top fig 5)



Forces occur only during changing rate spins

When spin rate increases (***A ccw B cw***)

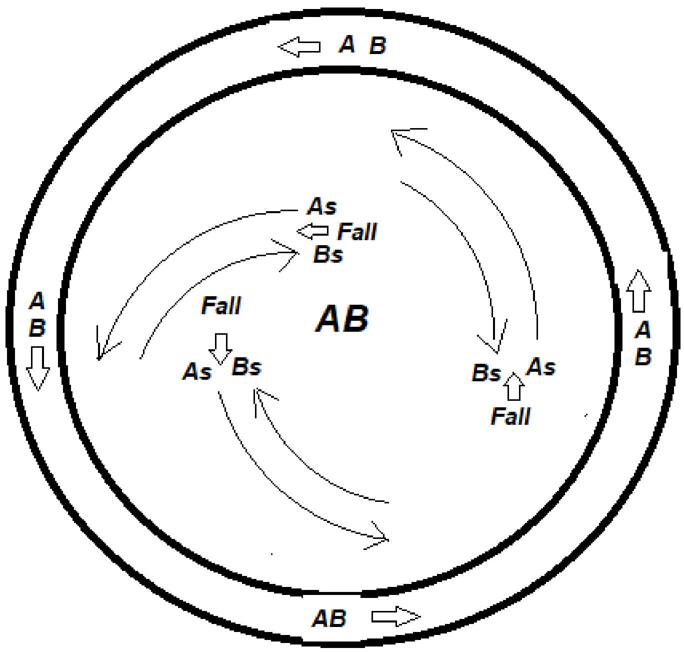
An ***A*** body in the field will fall left (***ccw***) and accelerate right (***cw***) because of the warpage from an ***A*** pull (Expansion of ***psr*** of ***A***). It will further accelerate right (***cw***) because of the warpage from a ***B*** pull (Contraction of ***psl***).

A ***B*** body in this field will fall right ***cw*** and accelerate left ***ccw*** because of the warpage from a ***B*** pull (contraction of ***psr***) and further accelerate left ***ccw*** because of the warpage from an ***A*** pull (expansion of ***psl***).

Section 9 Spinning fields

A and ***B*** bodies travelling inside a circular tube ***ccw***. They will create internal spinning fields.

Fig 7 Balanced curvature



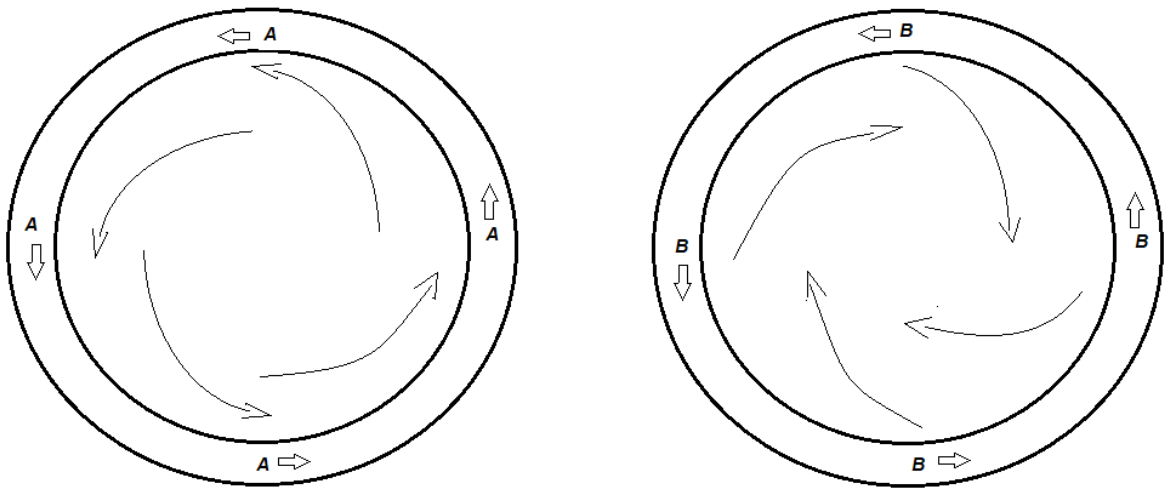
The field inside the circle is curved ***ccw***. The amount of curvature is determined by the speeds of ***A*** and ***B*** bodies in the tube.

A fall-curvature is the curvature in the direction of curved ***A*** space.

B fall-curvature is the curvature in the opposite direction of curved ***B*** space.

Bodies moving across this field must experience curvature fall. A week force that tends bodies towards counter-clockwise motion in fig 7 and clockwise if the ***AB*** bodies were spinning ***cw***.

Fig 8 Unbalanced curvature.



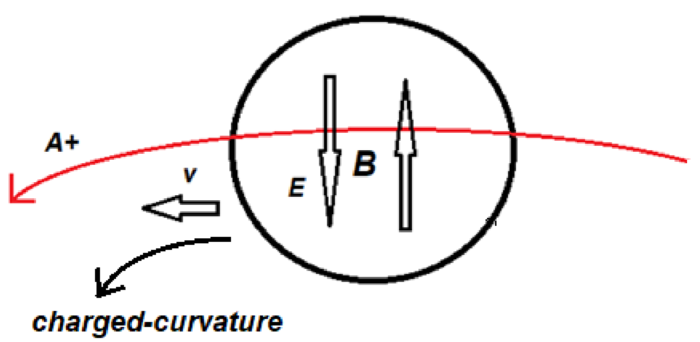
Curved ***A+*** space curved ***B-*** space

Unbalanced curved fields will cause greater displacement as bodies move within these fields. The direction of displacement is dependent on whether the field is primary or not. This will be called charged-curvature.

Bodies in motion in unbalanced curved space

Let's consider two-dimensional space. Internal bodies travel in curved pathways. We can break down internal particle travel to two linear pathways, right and left and up and down.

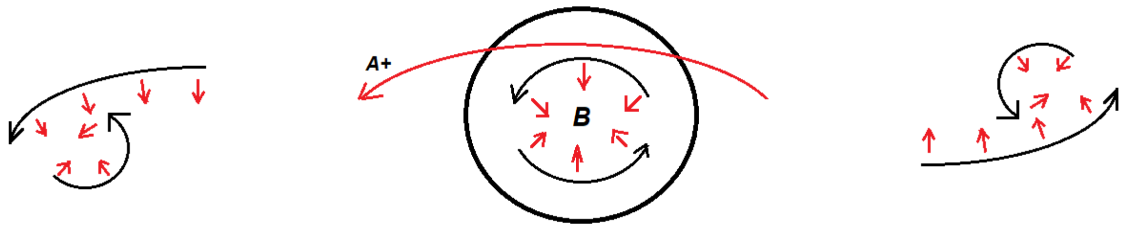
Fig 9 ***B*** moving left in curved ***ccw A+*** space



Curved ***A*** space is not primary for ***B***. As ***B*** moves left it encounters a downward component of ***A+*** space. The down particle segment of ***B*** is pulled and expanded by non-primary ***A+*** space which is curving down. This is an unbalanced change causing ***B*** to undergo a charged-curvature. It is forced to curve ***ccw*** as it moves left.

If ***B*** were moving right it would encounter an upward component of non-primary ***A+*** space. It would be forced to travel ***ccw*** also as it travels right but upwards.

Fig 10 Forces on internal particles of ***B*** in a ***ccw A+*** field.



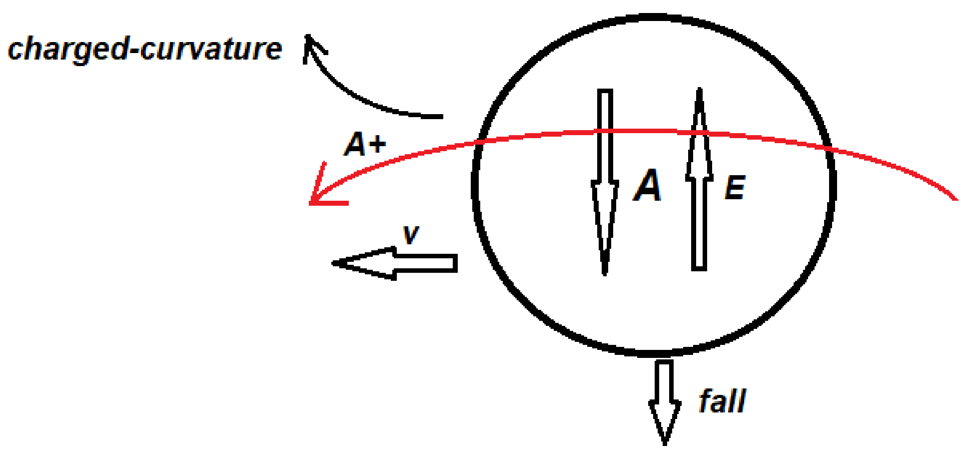
B moving left ***B*** not in motion ***B*** moving right

When ***B*** is not in motion forces are not cancelled but are all countered. (they can be cancelled by adding a ***cw B*** field)

When ***B*** is in motion one particle segment would be longer than the other thereby absorbing more force than the opposite segment and hence will lead to curving ***B***,s pathway of motion.

Force on ***B*** as it travels through a curved field is proportional to strength of the field (mass of ***A*** and spin rate) and speed of ***B*** (or ratio of right and left particle segments).

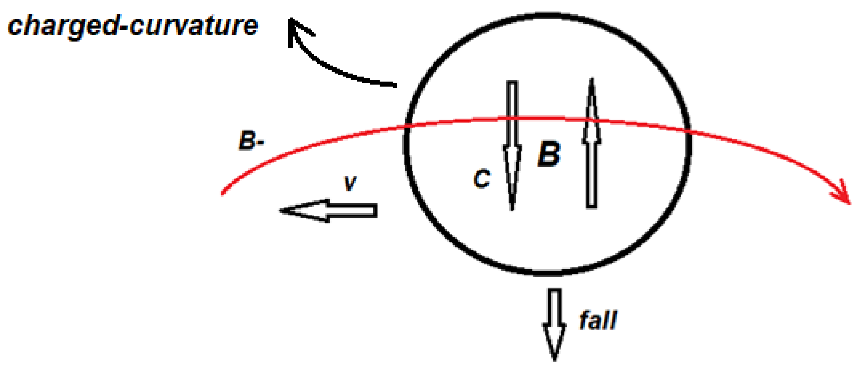
Fig 11 ***A*** moving left in a curved ***ccw A+*** space



In fig 11 as ***A*** travels left it encounters a downward component of curved ***A+*** space which causes particle segment down to fall downward. As ***A*** falls downward it detects an increase in up particle travel and expansion of that segment. There is a charged-curvature force causing it to travel ***cw***.

A undergoes charged-curvature in an opposite fashion than ***B***.

Fig 12   ***B*** moving left in a ***cw*** curved ***B-*** space   fall-curvature of ***B-*** space is ***ccw***



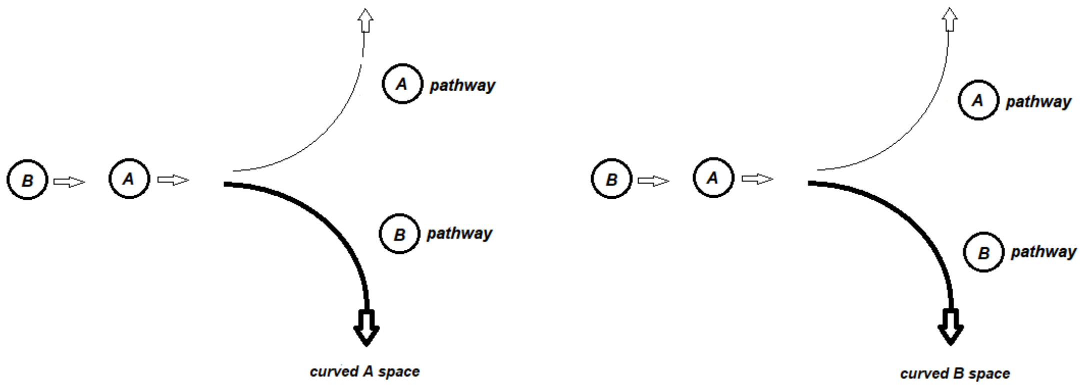
As ***B*** moves left it encounters an upper component of ***B-*** space which is primary. ***B*** falls downward (upper right particle segment falls down in the direction of fall) and detects a decreasing non-primary speed of space downward which contracts downward particle segment. There is an upward force on ***B***. ***B***'s charge-curvature is ***cw***.

Note that a ***ccw A+*** space in fig 9 expands particle segment down while a ***cw B-*** field contracts particle segment down. ***Ccw A+*** space combined with ***cw B-*** space is a balanced curve field where no stresses occur.

Law of charged-curvature. (We will use the same analogy as we did in section 2.)

If bodies fall-curve in the curvature of fall they will charge-curve in the opposite curvature. If they don't fall-curve, they will charge-curve in the same fall-curvature.

Fig 13



A space. Fall curvature is ***cw***

B charge-curves in the fall curvature of ***A*** space, ***cw***.

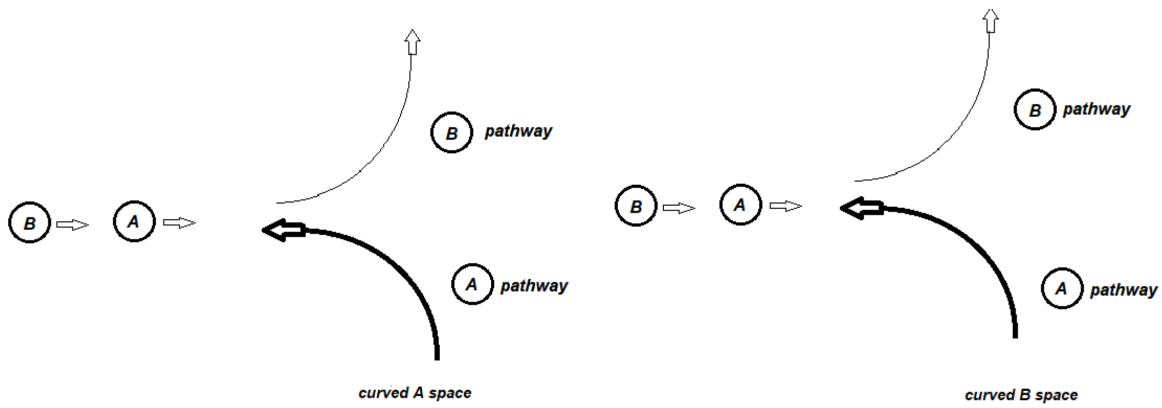
A fall-curves ***cw*** in ***A*** space and charge-curves in the opposite curvature of ***A***'s fall curvature, ***ccw***.

B space. Fall curvature is ***ccw***.

A charge-curves in the fall curvature of ***B*** space, ***ccw***.

B fall-curves ***ccw*** in ***B*** space and charge-curves in the opposite curvature of ***B***'s fall curvature, ***cw***.

Fig 14



A space. Fall curvature is ***ccw***.

B charge-curves in the fall curvature of ***A*** space, ***ccw***.

A fall-curves ***ccw*** in ***A*** space and charge-curves in the opposite curvature of ***A***'s fall curvature, ***cw***.

B space. Fall curvature is ***cw***.

A charge-curves in the same curvature of ***B***'s fall curvature, ***cw***.

B fall-curves ***cw*** in ***B*** space and charge-curves in the opposite curvature of ***B***'s fall curvature, ***ccw***.

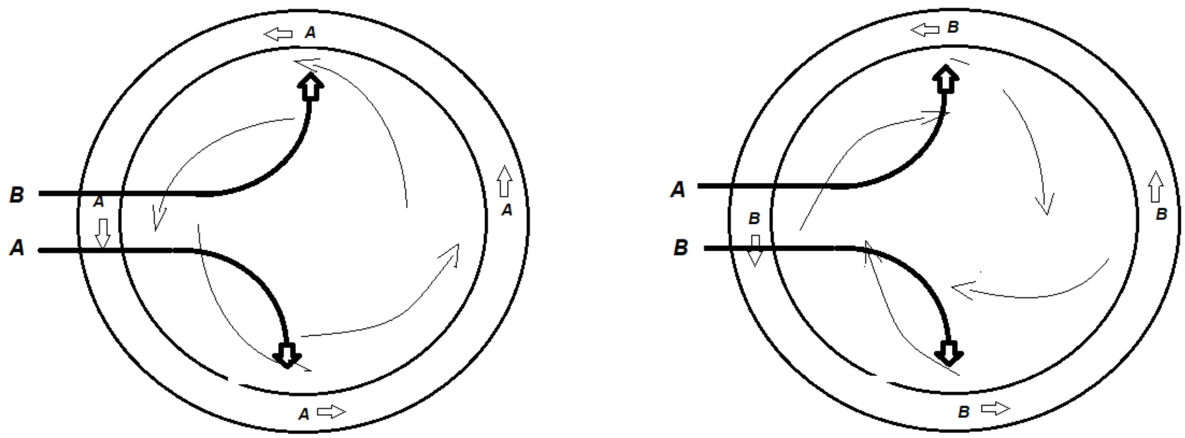
In a balanced curved field all curve charges cancel out and only fall curvature remains.

Charge-curve directions in an unbalanced curved field

B charge-curves in the directions of ***A*** and ***B*** space

A charge-curves in the opposite directions of ***A*** and ***B*** space.

Fig 15   field created by ***A*** bodies circling ***ccw***   field created by ***B*** bodies circling ***ccw***



In fig 15

B moving into an ***A- ccw-curved*** field will travel ***ccw***. Pulled ***ccw*** by curved ***A*** space.

A moving into an ***A- ccw-curved*** field will follow the opposite pathway, ***cw***.

A moving into a ***B- cw-curved*** field will travel ***ccw***. Pushed ***ccw*** by curved ***B*** space.

B moving in a ***B- cw-curved*** field will follow ***B***'s pathway, ***cw***. Opposite the fall curvature

If the spins of the fields are reversed the curvature pathways of moving bodies are reversed.

Section 10 Uniform spinning fields

Solid spinning masses in a uniform spinning field (we ignore charged acceleration forces)

Fig 16 an ***A*** mass in spin in a uniform ***A*** field. ***A*** mass is made up of ***A*** bodies.

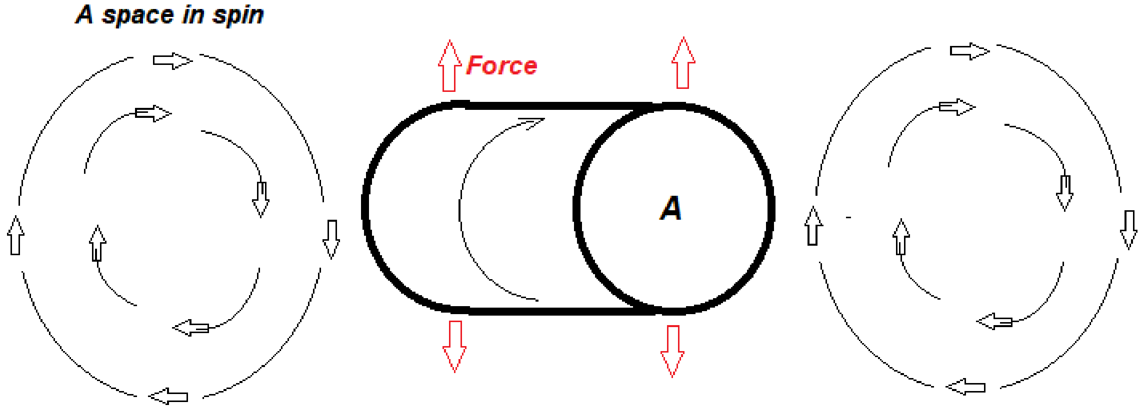
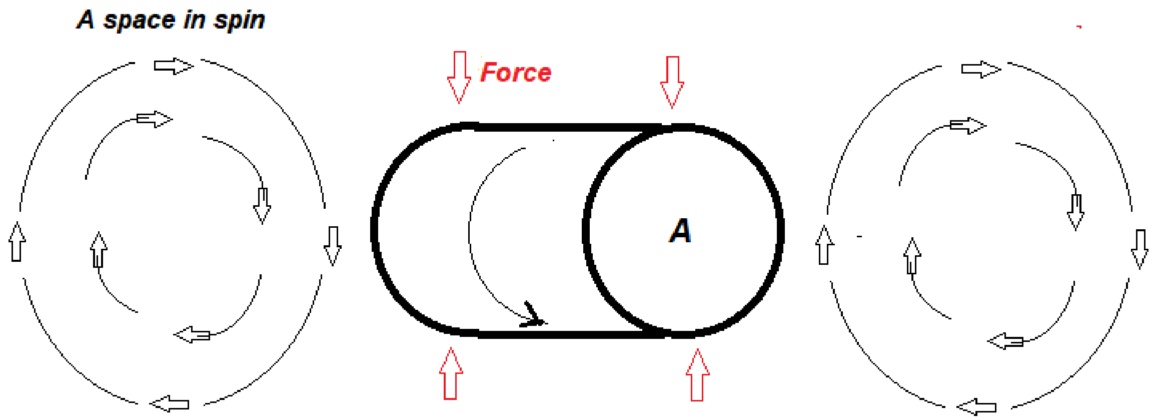


Fig 17 ***A*** in opposite spin



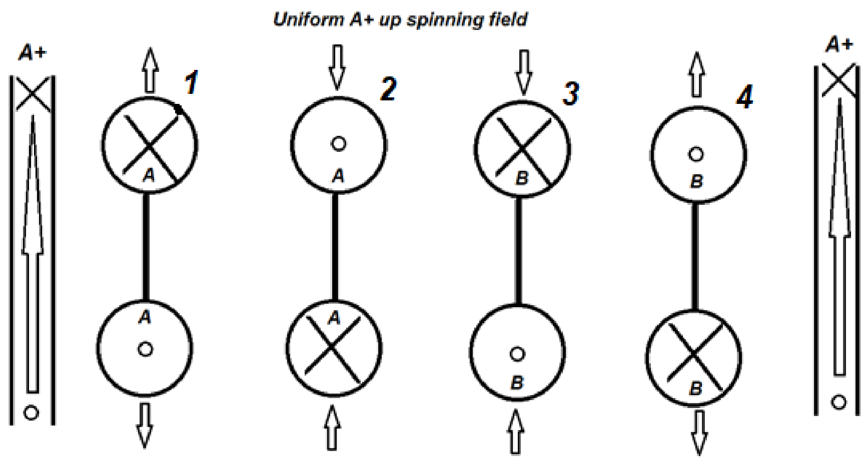
In fig 16 ***A*** bodies in the mass, moving across the field, are under forces to travel ***ccw***, but are held together by internal forces and forced to continue ***cw***. The body is stretched outward in this field.

In 17 ***A*** bodies are under forces to move in ***ccw*** direction. Through its fixed motion the field exerts a force perpendicular to the direction of travel. The body is compressed inward in this field.

These are called spin-forces.

We attach two bodies of the same type by a rod and put them in spin in a uniform field

Fig 18 Arrows indicate direction of forces, perpendicular to direction of travel as the bodies and rods spin.



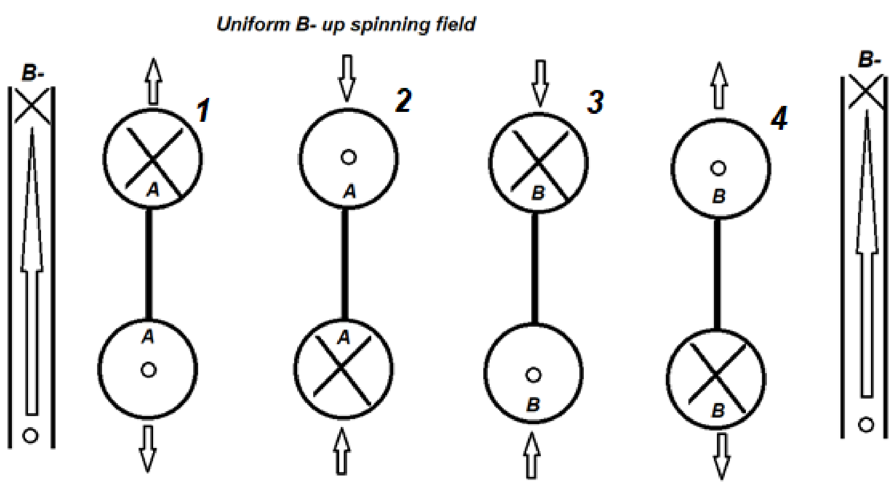
Position 1 ***A*** falls downward causing expansion of up particle segment, force is up.

Position 2 ***A*** falls upward causing expansion of down particle segment, force is down.

Position 3 ***B***'s down particle segment is expanded, force is down.

Position 4 ***B***'s up particle segment is expanded, force is up.

Fig 19



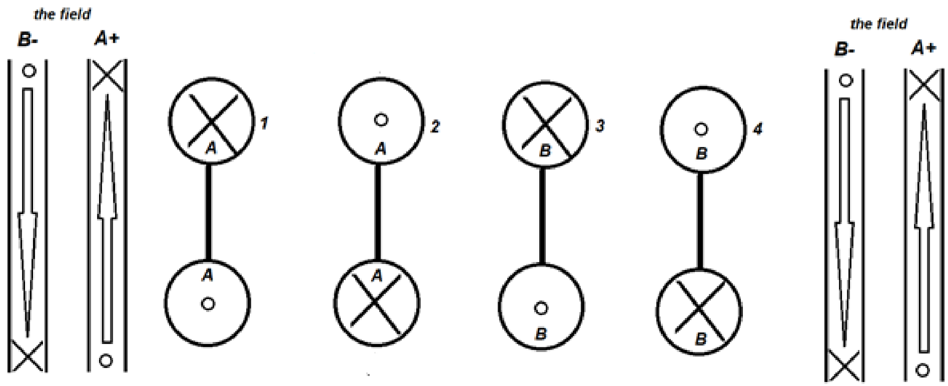
Position 1 ***A***,s down particle segment is contracted, force is up.

Position 2 ***A***'s up particle segment is contracted, force is down.

Position 3 ***B*** falls upward causing contraction of up particle segment, force is down.

Position 4 ***B*** falls downward causing contraction of down particle segment, force is up.

Fig 20   a uniform ***A+*** up-spinning field combined with a uniform ***B-*** down-spinning field

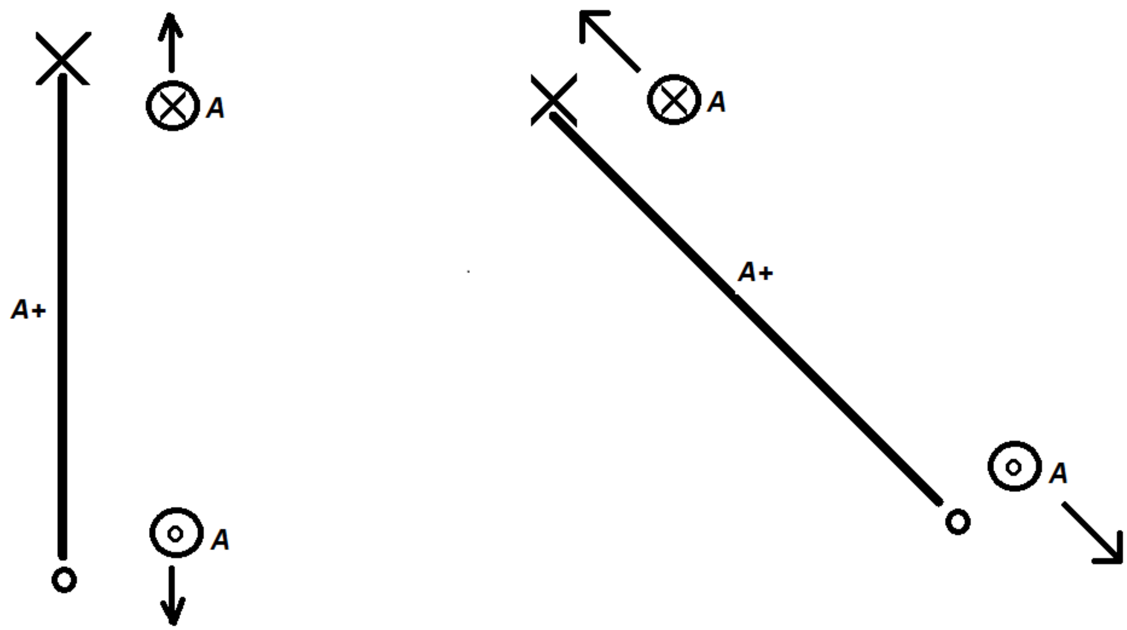


In all positions one particle segment is both expanded and contracted. No active force is present. This is a balanced curved field of the type from fig 7.

Section 10 Slanted fields

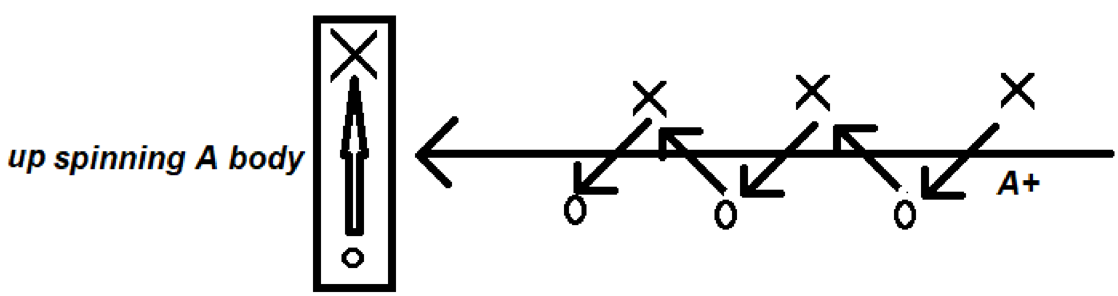
Consider a thin section of ***A+*** up-spinning space. If we slant the field, we change the direction of spin force.

Fig 21



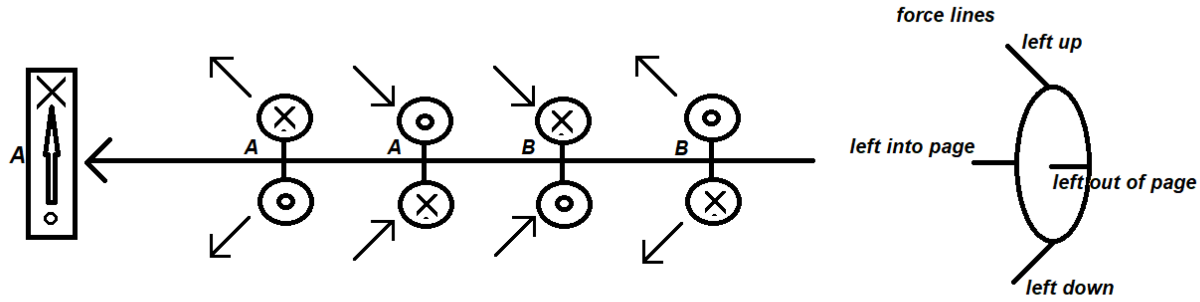
Creating slanted fields. Spinning bodies create their own fields. Spinning fields are created by bodies in circular or spinning motion. Spinning slanted fields are the result of **non-uniform** spinning fields.

Fig 22 direction of slants



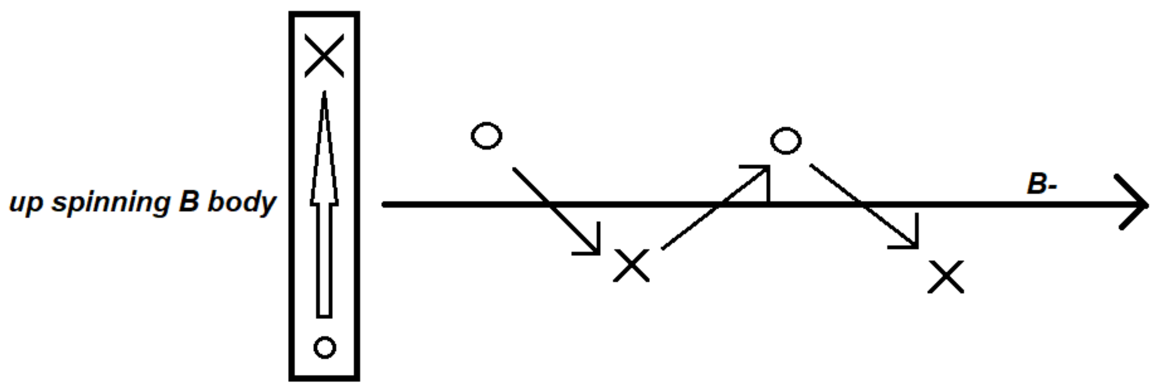
A pulls ***A+*** space inward. But If ***A*** is in spin ***A+***'s space is in a spiral and creates a rotating slant.

Fig 23 spin forces on spinning bodies



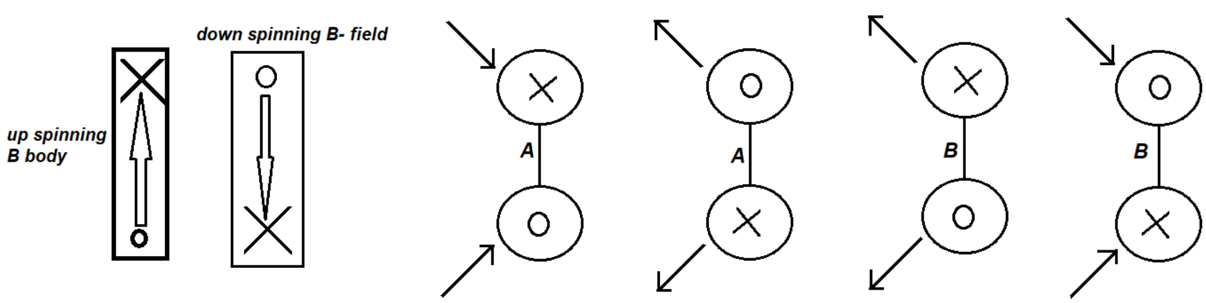
The spin forces rotate along with the bodies.

Fig 24 Non-uniform ***B-*** field



An up-spinning ***B*** body creates a ***B-*** field that spins opposite (down).

Fig 25 direction of forces in a down-spinning ***B-*** field. (created by up-spinning B body)



Slanted forces will cause attraction or repelling forces

Fig 26 downspin ***A*** attracts down spin ***A2*** and repels up spin ***A1***

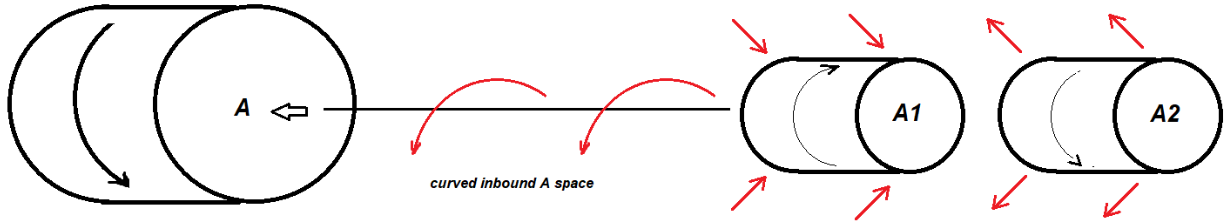


Fig 27 down spin ***B*** attracts downspin ***B2*** and repels up spin ***B1***

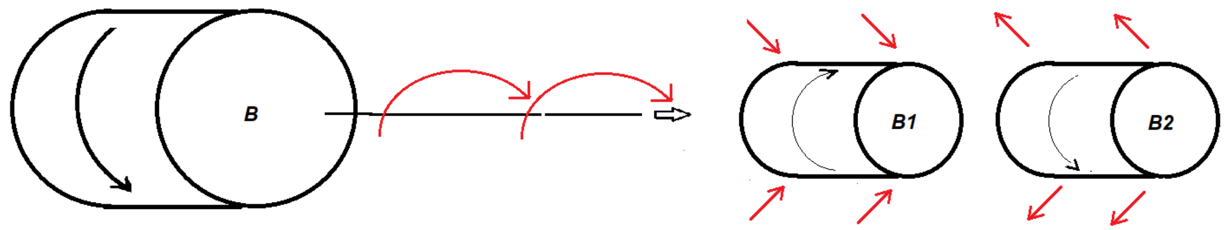
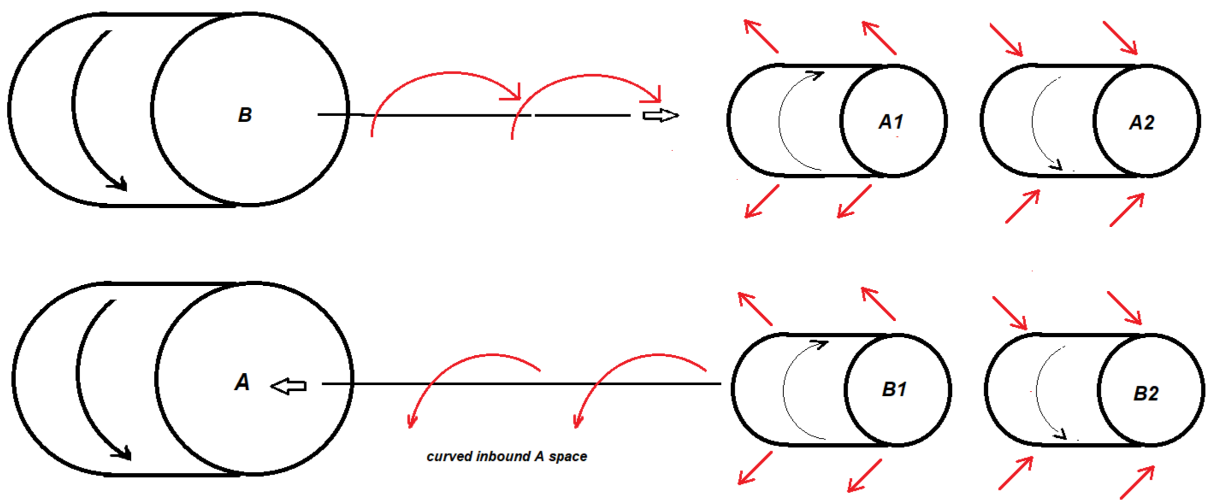


Fig 28 Down spin ***B*** attracts up spin ***A1*** and repels down spin ***A2***

Down spin ***A*** attracts down spin ***B1*** and repels up spin ***B2***



Similar spins   similar bodies attract

Opposite spins   similar bodies repel

Similar spins   opposite bodies repel

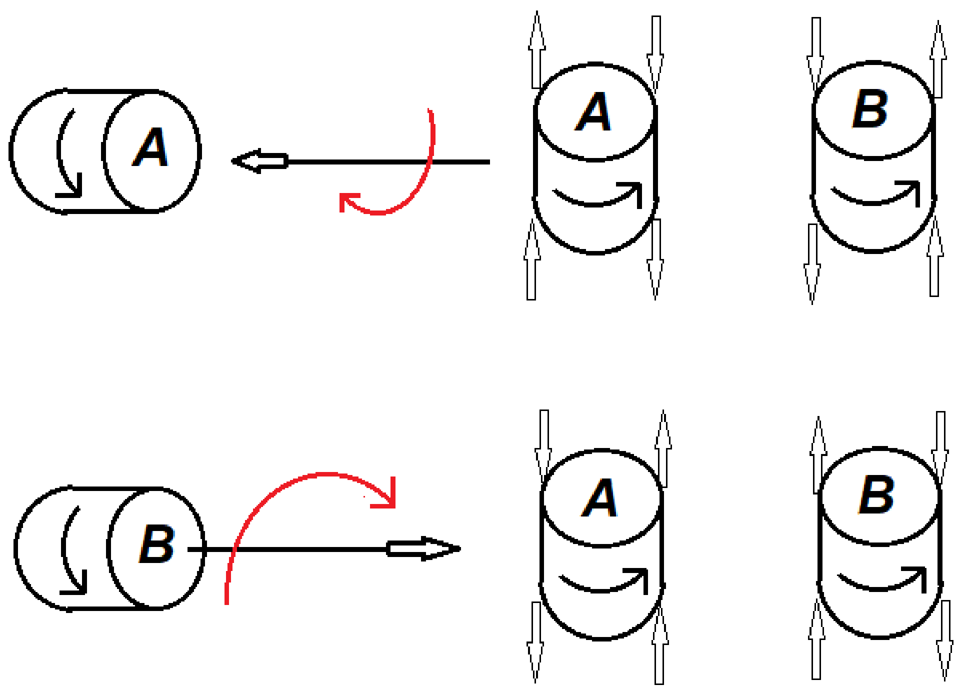
Opposite spins   opposite bodies attract

Attraction and repelling spinning forces of two opposing bodies are determined by both rate spins and distance between.

An ***A*** and ***B*** body spinning together in the same direction produce a balanced curved field with no charged spin-force.

Preferred alignment   We hold horizontal spinning bodies fixed

Fig 29



Spinning masses spinning upright (perpendicular) in a field have bodies on one side travelling across the field in opposite direction than the other side. In fig 27 into the page on the right and out of the page on the left.

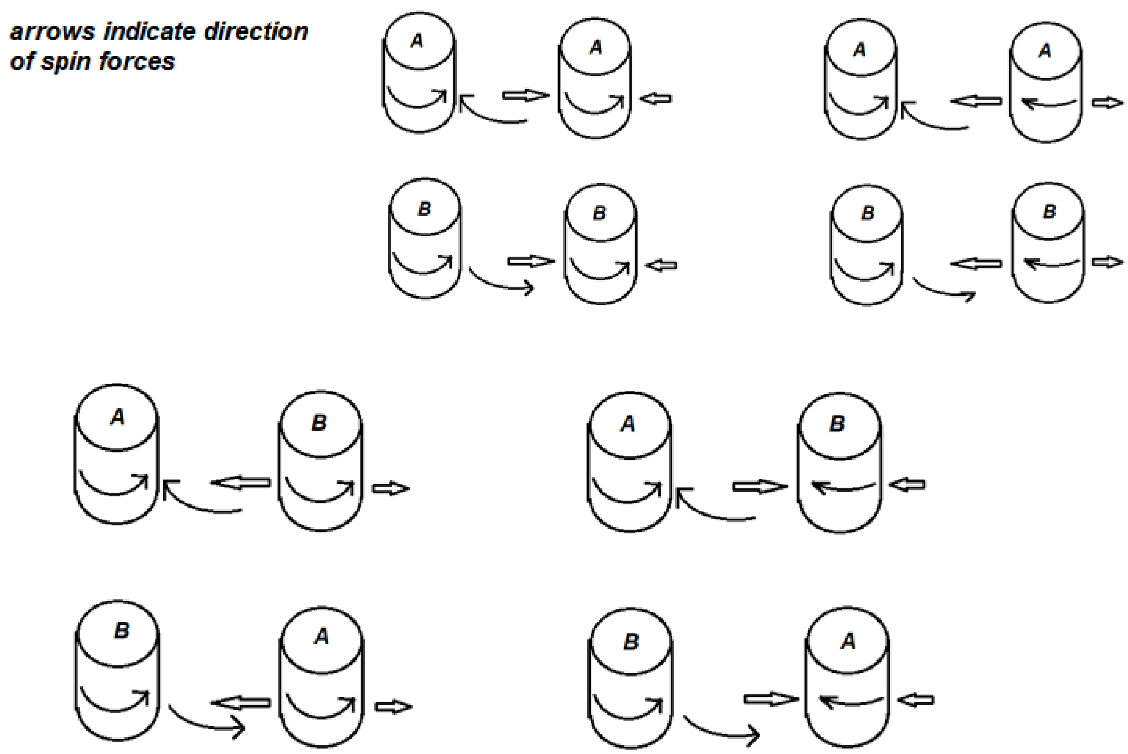
Depending on the field, bodies will tip and align.

All bodies seem to align in attraction.

Upright spinning bodies and curvature gradient

An upright spinning body will curve space along its horizontal axis creating spin-forces. The closer to the body the stronger the force. There is a gradient in force strength.

Fig 30 Upright bodies in spin. Arrows indicate the direction of spin-force



Because there is a gradient of spin-forces, the forces on the left of the affected bodies are stronger than the forces on the right. This will cause attractive and repelling forces to occur.

Similar bodies with similar spins repell	similar bodies with opposite spins attract
Opposite bodies with similar spins attract	opposite bodies with opposite spins repell

Conclusion

Parameters that affect the properties of space

1 balanced changes to the speeds of space (***ss***)	Gravitational fields
2 unbalanced changes to the ***ss***	electric fields
3 balanced curvature to the ***ss***	curved space
4 unbalanced uniform curvature to the ***ss***	magnetic fields
5 unbalanced non-curvature to the ss	magnetic forces