<u>SANKHYA THEORY</u>

<u>Unique experiment to verify Sankhya Theory's axiomatic derivations during the Annular Solar Eclipse on 15 Jan 2010</u>

<u>1. The background.</u>

The published scientific media reports and astrological almanacs indicated that the path of the annular solar eclipse on 15 Jan 2010 would be about 12 degrees south of Kotagiri, Nilgiris, Tamilnadu, where I reside. Since Kotagiri's latitude of 11 degrees north was just outside the path of the total eclipse, I decided not to conduct the unusual experiment I had planned about 20 years ago, to verify Sakhyan principles. However, on realising that such close an opportunity may not come again, I changed my mind and decided to try out the experiment on the night before the eclipse. Hence, I prepared for the experiment only on the morning of 15 Jan 2010.

<u>2. Brief overview of the theoretical foundation on which the experiment is based.</u>

While Sankhya forms a complete, unified, theory of Universal manifestation based on axioms (please see my website below for details), it is radically different from the current theories in Physics and Cosmology. Hence, in order to understand the rationale on which the above experiment was structured, it is absolutely necessary to outline very briefly the unique theoretical principles on which Sankhya is founded, Moreover, the logic of the experimental findings can only be understood and validated through Sankhyan principles outlined below.

The main reason, as given below, is that classical Physics and Cosmology primarily define space as a void in a vacuous state, which is diametrically opposite to Sankhyan logic. In space devoid of identifiable characteristics the concept of 'velocity' of energy and mass transfer can be sustained mathematically. But in a medium (like air or water for example) that concept is not workable because stresses in it are transferred from one molecule to the next as a transmigratory process where the movement is always from a higher oscillatory rate to a lower one, equivalent to a temperature transmission process. Therefore the rate of oscillation becomes critical where the time interval between oscillations reduces as the vibratory rate increases. Gauging velocity needs a constant time standard whereas transmigration needs a constant oscillatory cycle. At the end of this write up a more detailed explanation will be given to enable the reader to understand why Sankhyan logic must be applied in a substantial space medium. All the statements made below are substantiated in my book and articles on my website and hence explanations here are limited to making the experiment understandable. However, critical numerical data has been given where relevant, but without the axiomatic derivational process.

The significant points, on which Sankhyan logic is based and is also critical to the understanding of the results of the experiment, are very briefly as follows:

1. Space is defined as substantial volumetric medium comprising components, with axiomatically derived characteristics, in a perpetual harmonic oscillatory state that remains at a constant interactive rate C cycles/ per standard cycle,

$$\text{based on axiomatic mathematical logic. C=}\ \ 10^{\left[\left[5\sqrt{\left[\frac{2}{\sqrt{1^2+2^2}-2}\right]}\right]\right]} = 2.9657596692\ \times\ 10^8$$

(C=2.9657596692E+8 interactive cycles / second when the displacement per cycle is one meters. C is a universal axiomatic constant.)
2. The perpetually dynamic components interact with each other, creating stresses that can transmigrate across it in all directions as a volumetric ensemble.
3. The three phases of the interactive stress cycle are defined as compressive collision, rebounding resonance and expanding transmigration.
4. In the compressive phase all the stress cycles act simultaneously and merge to become coherent & centred. In the resonant phase the rebounding stresses act resonantly within a harmonic boundary where they remain as an oscillating ensemble. In the expansive phase the stresses transmigrate from higher oscillatory rate to a lower one (the constant C cycles/second) as a process of sequential transfer. (The surface of a balloon expands simultaneously under increasing pressure. Similarly in space the volumetric surface areas compress simultaneously under increasing interactive stress count densities.)
5. The fundamental logic is that the observer can only detect a change in activity or a change in the interval of time which limits the detectable phase to transmigrating stresses that display a sequential interval in a cyclic period. If interactions occur extremely close to each other the stresses would transmigrate as a continuum and therefore would not be countable but would have to be equated to a constant.
6. In a balanced oscillatory state the interactions in the simultaneous state merge to act as a coherent volume while at the same time the resonant phase acts as a harmonic volume within a specific oscillating boundary and therefore stresses do not transmigrate sequentially. Most significantly and logically when space components are in balance there is no detectable stress transmigration and is similar to a state in thermal equilibrium where the temperatures equalise. Stress count transmigration commences when the inward and outward oscillatory displacements are unequal, otherwise it cancels out. Hence the volumetric components in space interact and oscillate in the same location without a detectable transmigratory movement.
7. If and when that balance is upset the stress transmigration cycle commences and stresses are transferred from a higher rate to the constant axiomatic rate C at which the space components always remain and interact perpetually & harmonically. When the harmonic boundary is interrupted, the interactive stress counts rise logarithmically and the entire resonant stress-boundary transmigrates as a single surface displaying the second order characteristics of a pressure wave-front with flux density. However when the disruptive rate is high enough to break the coherent volumetric state, then stresses rise logarithmically and transmigration rate increases as a third order accelerative volumetric wave-front that displays the characteristics of density or mass transfer.
8. Finally, the observer can detect only sequential transmigration as an increase in the interactive stress count rate or a decrease in the cyclic time interval T between interactions, which can be counted. Whereas the change in the harmonic interactions at the boundary surface area can be only equated or calculated using T squared as the variable (pressure). The reason is that harmonic interactive displacements in both direction being equal, it cancels out When

the coherent & centred state changes it can again be only equated or calculated using T cubed as the variable (density). Explaining it further, area is length squared and equals (velocity x time) squared. At the same velocity, it is just proportional to time squared. Similarly volume is proportional to time cubed.

The foregoing principles apply to every state in reality as: the fundamental particles, the proton / electron configuration, molecular states, planetary bodies, stellar objects, galalaxies and every coherent state and resonant state in any homogenous medium...
All the 8 points listed above must be applied to the experimental result to establish the correctness of Sankhyan Theory.

3. The anticipated sequence of reactions and the selection of suitable equipment for the experiment.

The primary focus of the experiment was to demonstrate that reactions were initiated only when the balanced state of the interacting components in space was disturbed.
Secondly the defined three phases of the interaction did exist and it displayed reactions that followed second and third order characteristics that could not be detected but could only be evaluated or equated as a distinct event. Whereas the transmigration of stresses followed sequential time characteristics or the intervals were countable as distinct events. Explaining it further, ten claps one after another is a sequential event that is countable. But if ten people all clap simultaneously, at the same instant, it would be counted as one massive clap, hiding the 9 additional claps merged in it.
Thirdly, that there existed a substantial and interactive connection throughout the Universe, demonstrating that space was not a void but an identifiable medium through which distant events created a cause and effect reaction that was locally detectable, measurable and equatable. It also displayed measurable characteristics of a time interval as a ratio of two varying activities.

In order to establish a perpetual state of balance it was decided to float a wooden rod vertically in a tank of water with its bottom end weighed down to make it rest firmly on the floor of the tank. Adjusting the depth of water in which the rod remained vertical would enable it to respond to the smallest forces that affected it. It was necessary to choose common materials to establish the universality of the interactive effect of space. The entire setup had to be under the open sky so that stray effects would not distort the result. The most important point was that the process of balancing had to be constant and continuous naturally, thus emulating the real state of balance among the components in space. Therefore, mechanised means of control to achieve the perfect balance could not be used.

4. The equipment.

A rectangular roofing timber of 1.1 x 1.8 x 38 inches was finally selected as the rod. A round headed fibreglass sheet roofing nail about 2 inches long was hammered into the bottom end. The roofing nail sandwiched 4 numbers 0.375 inch thick (totalling 1.5 inch) ceramic speaker magnets of about 2 inch outside diameter with a central hole of about 0.75 inch. Ceramic speaker magnets were chosen as it would not shift from its central position since it was sandwiched by the steel nail with a rounded head. Further the round head of the nail rested in the bottom of the tank with the ring magnets forming the counter weight at the lowest point. Hence the magnetic rings being firm the centre of gravity of the rod would not vary even if it swung over a large angle of inclination because of any change in the counter weight position. The total height of the rod and nail was 39.5 inch.

The rod was placed in a 500 litre flat bottomed PVC tank and the water level was adjusted to 31 inch so that rod remained vertical but also rested firmly on the floor of the tank. It was so finely balanced that a light breeze set it swaying over a 15 degree arc as the round head of the nail allowed it to sway freely and eventually return to the vertical balanced position.
The tank was located between two buildings under an open sky. In order to stop any breeze through this corridor a cloth screen on a portable-clothes dryer was erected close to the tank that cut off all air movement. A long metal curtain pipe was securely placed in an absolutely vertical position near the tank, to act as the marker against which the change in the angle of the rod could be gauged and measured. Two digital cameras were kept ready on small stools to take pictures periodically. All the foregoing preparations were completed by about 11 am IST. It had taken three hours to complete these preparations.

5. The experiment in real time.

The eclipse started at around 11.22 am here. A dark film strip was used to visually observe the eclipse. At about 11.30 the rod started to slant or swing away from the vertical, towards the Sun / Moon position. The angle of inclination kept increasing very slowly in synchrony with the rate of progress of the eclipse. At about 1.30 pm IST the maximum annular phase occurred but the ring of light was not equal all round, as the location of Kotagiri was about 12 degrees north of the path of totality. The ring was a crescent when the maximum annular phase of the eclipse occurred and the angle of inclination of the rod had reached about 2 degrees in the direction of the Sun / Moon position.

At this point a sudden and unexpected movement took place.

The rod flipped over in a semicircular arc and swayed over to the opposite direction and settled into the same angle of inclination of about 2 degrees but away from the direction of the Sun/moon position. The movement was very steady, smooth & even but relatively quick. When it had reached the same angle of inclination on the opposite side the rod stayed in that position as though a damping force had restrained it. It was very unlike the swaying due to a breeze, when it had oscillated several times over a large arc. The entire change over from one side to the opposite one was completed in about 8 to 9 seconds. As such a quick manoeuvre was not foreseen there was no stop watch etc for it to be timed accurately. When the swing over started I thought a breeze had sprung up but the limp state of the wind protection screen confirmed there was no breeze. It was then that I realised the null point of the eclipse had been reached and started taking picture every few seconds. From the frames that captured this sequence, I was able to gauge the interval of time as 8 to 9 seconds. Considering that it took nearly 2 hours to swing over 2 degrees, it must be recognised that it was indeed a violent change over of about 4 degrees in approximately 9 seconds.

Then as the eclipse proceeded towards its end, the rod came back very slowly to its original vertical position by about 3.20. It occupied the same position as it had at start. The swing over was sudden at around 1.30 but the return back to its original position was slow and gradual.

The distinct separation between Sun and Moon occurred at around 3.30 pm. I took periodic snapshots (about 200) of the experiment. The photos of the Sun / Moon eclipse phases did not show up even through darkened film strips for it was overexposed. As I did not anticipate any surprises in the result, I had mentally ruled out the need for a movie of the entire experiment. Had I an inkling, that stills would not capture the critical manoeuvre I would have switched over to movie mode. In fact I did switch one of the cameras to movie mode thinking it is better late then never; but unfortunately it had leaned over and took a movie of the floor while I was concentrating on stills.

The relevant still photographs of the entire sequence is attached. From the 200 pictures, all the snaps that did not show a distinct change have been removed to prevent clutter. A control set of pictures were taken but as they do not show any deviation that would be contrary, these have not been added here.

6. The analysis of the reactions based on Sankhyan logic.

Summarising the important events during the eclipse leads to 4 distinct observations that confirm the Sankhyan principles.

Though the eclipse started at about 11.22 am the actual effect of that approach did not create any reaction even though light travel time is only about a second from the Moon. It took approximately 8 minutes (11.30 am) when the rod began to move away from the vertical. The 8 minute period has a distinct connection to the disruption of the resonant state due to the Moon's invasion of the coherent column of space connecting Sun and Earth. Since that column was in a balanced state, there would not have been any detectable stress transmigration.   The 8 minute or 480 second difference was the ratio of orbital time difference between that at the surface of the Earth and the orbital radius of the Moon. The Moon's position during the eclipse had an orbital period of about 2411000 seconds and the Earth's surface at about 5045 seconds, giving a ratio of 477.9 time cycles. Taking each cycle as one second it equals 7.96 minutes.

This ratio of delay in stress transmigration must be understood strictly from the standpoint of the Sankyan logical foundation. Even though the Moon is orbiting the Earth, the lunar body is in a relative 'static' state of balance, because the Earth / Moon distance remains constant. Hence no transmigration of stresses would take place between the two. However, when the eclipse disrupted the balance, a surface stress-wave at a rate higher than C (ref; item 1 in Para 2) was initiated and it took 477.9 cycle time or seconds, to reach the Earth's surface.

The clock time of 5045 and 2411000 seconds are to be interpreted as the indicator of the dynamic state of the area of space acting as a simultaneous surface at those locations. Explaining further, it meant that 5045 interactions occurred simultaneously in a single cycle of one second at the Earths surface. Similarly 2411000 interactions occurred simultaneously in a single cycle of one second at the Moons orbital surface. The two time values are indeed ratios of radii and velocities at those points or they are the ratios of rate of change of surfaces that act simultaneously.   Hence the simultaneous surface area stress change must be calculated as a ratio of simultaneous-cycle change. Reiterating, the 5045 and 2411000 values are indicators of a simultaneous 'surface area stress' cycles, for in the medium of space the arbitrary second of time has no validity but the relative rate of change gives the real 'time' difference as a ratio of area change that is proportional to time squared. Recalling that space maintained a constant harmonic interactive rate of C per second the two values of 5045 and 2411000 was the measurable value of the logarithmic rate of change of C. This factor has complex connotations (phenomena of volumetric Doppler shift). Hence I have avoided explaining it here but it is fully explained on my website content, The proof to scientists would be that if the ratio of the two values is raised to the power of 2, it would equal the ratio of change in volume of the two orbits, Earth and Moon as(Re / Rm) cubed.
The ratio of Earth's surface radius and that of the Moon is approximately 61 and equals as shown below

$$\left(\frac{5045}{2411000}\right)^{\frac{-2}{3}} = 61.12573$$

The above equation is classically called Kepler's law. But Sankhyan logic produces the same result using a real and axiomatic structure of space as its foundation. Moreover as defined earlier only a change in time could be detected.

The logical explanation is that in a medium (just as in large bodies of air or water) only interactive stresses can transmigrate and on an expanded surface area that is in a balanced state, every point of stress acts simultaneously or at the same instant or else the surface would not exist. (Even by Newtonian formulation (R1/R2) squared = (T1/T2) squared if velocity is a constant, taking R and T as radius and time)
The above interpretation can be verified very easily by an experiment (given below) because the same delay of about 460 seconds occurs between Moon's azimuth position and the point of maximum rise in height of tide. Similarly the difference of cycle time of maximum height of solar tide and the Suns true azimuth position is about 52 minutes. (See note on experiment below). It is pertinent to point out that there is no recorded reference of the delay in any scientific forum.

The 8 minute delay provides the first proof of a substantial medium forming space.

At about 1.30 pm the rod changed direction by swinging over a half circular movement and began moving over to the opposite side.
Then about 4 seconds later it reached the vertical position at the half way mark.
It continued swinging over in the same direction for about another 4 seconds and reached the same angle of incline of about 2 degrees in the direction opposite to the Sun / Moon position.

Summarising, the swing over to the opposite side covering the three phases, occurred in about 8 seconds.

As the Moon approached the column of space between Sun and Earth, it was a compressive or colliding interaction. In a compressive collision the interactive count rate reduces by merging (increase in density) that initiates transmigration of stresses towards that point. Therefore the rod began leaning over in that direction. Here the most significant reason is that the location of the centre of gravity of the water in the tank and that of the rod changed due to the Moon's intrusion.

When the Moon at maximum phase entered the centre of that column the interactive stress density would have equated to that prevailing there between Sun and Earth. The stress count rate at resonance would have halved by merging and the reduced count would have increased the transmigration rate from the existing rate, as stresses always move towards a lower rate. Hence the rod leaned over to its maximum position.

When the centre of gravity of Moon coincided with that of the Sun / Earth line up the stresses would have risen sharply or logarithmically, thus creating a physical displacement of the section of that column, equal to the diameter of the Moon. It therefore created a volumetric displacement in a column of space the length of which was already fixed by the two centres of gravity of Sun and Earth. The crossing time of about 2 seconds would have created a massive stress displacement wave front that not only had a 'volume' but also an increase in stress density, which would have created 'mass' characteristics even in the resonant state. That wave transmigrated along the line of centre of gravity between Earth and Moon as a 'near instantaneous' impulse that flipped the rod over. When stress transmigration turns into an impulse the components in space act as a rigid connection momentarily and the transfer of stress is ' simultaneous or instantaneous'. It provides the evidence for 'gravitational waves' transferring 'mass' characteristics almost instantly as a tunnelling phenomenon. As an example, if one end of a rigid rod is pushed, the other end will move instantly or simultaneously. The centre of gravity locations changed again but instantly. (The same phenomena has been detected and recorded in many experiments similar to the one conducted by Maurice Allais on pendulums)

As the Moon crossed the centre line of the column of space connecting the Sun and Earth, it started to separate and the compressed stresses began to expand and transmigrate in a sequential time-displaying mode. Therefore the rod slowly returned to its original state of balance as the transmigration rate kept on reducing till it reached the normal state prior to the eclipse.

In the foregoing graphic description every critical aspect in the list of 8 Sankhyan principles of stress creation and dissolution, is covered. The mechanism of so called 'attraction and repulsion' aspect in space has been described as a logical sequence of 'cause and effect' interactive cycles, that could only take place in a dynamic medium, which space is. The above statement has covered all the 4 aspects, as the delay in transmigrating interval, the leaning over of rod towards the Sun / Moon position, the sudden and detectable flip over of rod from one side to the other and the gradual return to its original state of balance.

This is the second proof that the structure of space is exactly as defined in Sankhya.

7. Conclusions

Analysing the results of the remarkable sequence of events, from an extremely simple and rustic experimental setup, leads to several important conclusions.

a. Space must be composed of substantial components or particles, or otherwise an object with mass could not have been first "attracted" and then suddenly "repelled" in a "line of sight" interactive event covering great distances in real time.

b. The mode of change indicates alteration of phase, polarity and potential parameters equating it to classical electromagnetic behaviour. It is similar to the change in phase and polarity when the pole of a magnet is passed over the core of a coil. The similarity reinforces the Sankhyan view that gravity, electromagnetic and nuclear interactions are identical processes that take place in its 'own time' or the real interactive interval exists at its' respective location.

c. Elaborating, coherent interactive stresses, in a volume of space, act as a single, centred ensemble where the stress-counts merge to form the centre of gravity, displaying mass density characteristics. Hence the bodies in space are not solid in the real sense of the word but an amorphous collection of space components at a high compressive stress-density, held together by the inward transmigration of stresses towards the 'unit stress count state' at centre, caused by merging. The amorphous nature of stellar and planetary bodies lead to changes in its structure due to tidal forces and earthquakes and this factor has not been recognised theoretically. Sankhyan theoretical derivation highlights this factor and in the coherent state the stress count transmigration rate is approximately 23 cycles per second.

d. The coherent state is the equivalent of the potential in electromagnetic phenomena and frozen state in thermal behaviour. The change in phase in space bodies from the harmonic state to coherent state initiates the rise in mass density above one, equated to Newton's gravitation constant. In the electromagnetic domain it signifies the change from the magnetic flux density phase to the particle state equated by the complex nuclear coupling constant. In the thermal phase it marks the phase change from liquid to solid, equated to the latent heat of fusion.

e. Outside the coherent boundary the stresses remain in resonant equilibrium and transmigrate as simultaneous surfaces displaying flux transfer characteristics, when the balance is upset. Beyond this boundary the expansive transmigration commences as a spectrum of harmonic surfaces extending to its radial limit. In the context of gravitational bodies it represents the several levels of the atmospheric envelope. In electromagnetic phenomena it depicts the electric charge phase and in thermal phenomena the vapour phase. The purpose of identifying these boundaries is to expose the unification of all phenomenal states as different interactive harmonic stress levels existing in its own time bands in substantial space.

f. Gravitational acceleration is due to the transmigration of unbalanced interactive stresses among the components that form the medium of space. Transmigration of stresses always takes place from a higher to a lower state of interactive stress count rate. The lowest stress count rate in the medium of space, far from stellar and planetary bodies, is at C (shown in Para 2.) stress count cycles per period and is derived axiomatically in Sankhya and very nearly equals the frequency of a meter-wavelength of in a light wave. Further the maximum stress count rate per cycle (second) is 3.8682436772E+35, if the frequency of a meter wavelength of light is taken as 2.9657596692E+8. At the Earths obital radius the value of CL as the measured velocity of light in a substantial space medium is:

$$CL = (\log(C)) + \frac{Rs}{Ro} = 2.99792462 \times 10^8 \frac{cycles}{second} \text{ when displacement is in meter per cycle}$$

Where the Earths orbital radius is $Ro = 1.489E+11$ meters and Sun's radius $Rs = 6.9756E+8$. The ratio $CL/C = 1.01084542$ Is the equivalent of the Doppler blue shift in the medium of space between Sun and Earth. The Michelson Morley experiment gave a result of 299792458 per cycle when displacement wavelength is m/sec but it was <u>not</u> recognised then it was to be compared to a standard oscillatory rate C of the perpetual harmonic oscillatory state at which the components interacted resonantly.

g. The ratio Rs/Ro is the simultaneous change of potential (static head) that influences the transmigration of stresses between the Sun and the Earth. Hence the real oscillatory rate of light at a meter wavelength at every planetary orbit would be determined by the Rs/Rn equivalent ratio at that orbital radius. The above is an extremely simplified example of behaviour of interactive stresses in substantial space. The same principle allows the derivation of the Doppler shift with distance for all coherent or centred bodies in space, all of which will show a blue with respect to C but would indicate a red shift if compared to the CL value of 299792458 at a m/sec. The entire spectrum of Doppler shift with distance has been derived and tabulated in my forthcoming book. Similarly, there is a delay in stress transmigration of a light wave with distance, reported as the Pioneer anomaly and is equal to $\frac{\sqrt[3]{2}-1}{c}$ = 8.764 x 10^{-10} meters/sec.

10. The orbits of planets fall on a logarithmic curve as N squared (N being the sequential order of the orbit) shown in the graph below. I am certain this derivation must evoke intense interest among scientists as it is similar to the hydrogen spectrum.
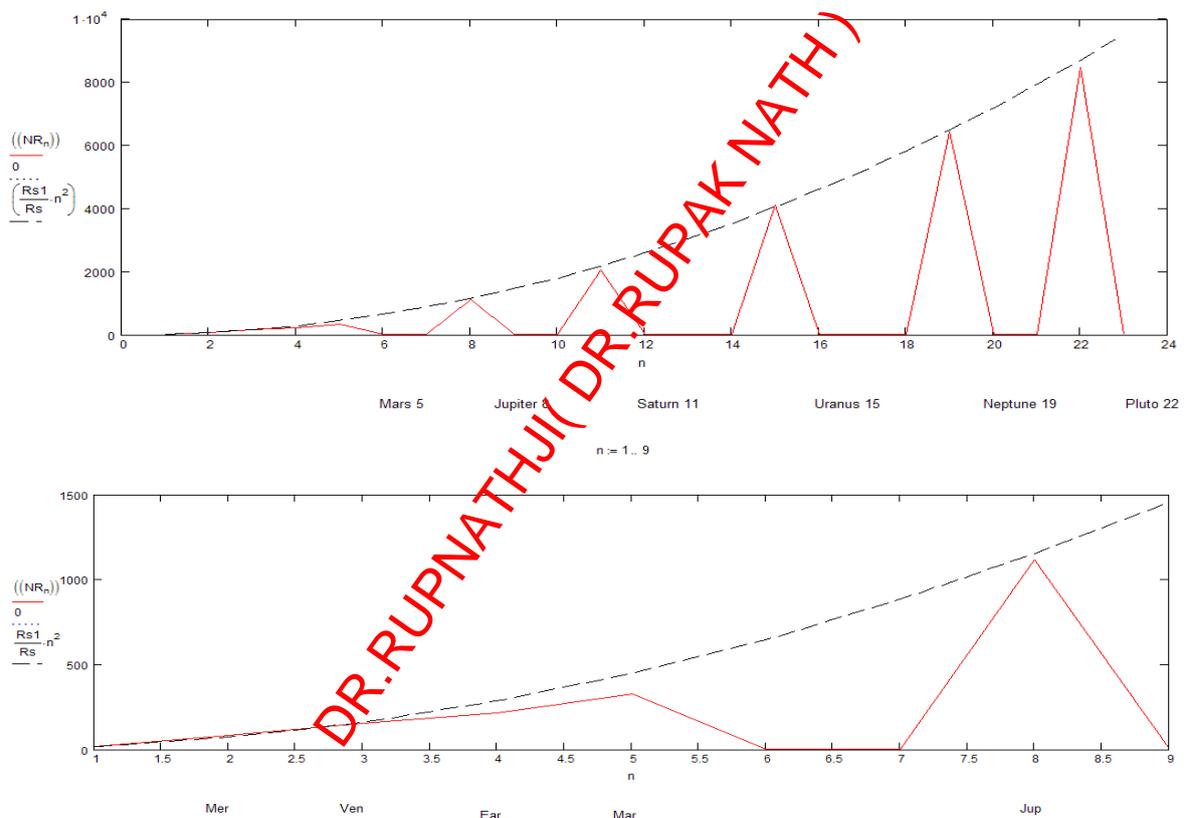
The planet Earth and Mars fall below the resonant curve for a number of theoretical reasons explained in my book. The 6th position can never form a coherent planetary body for the stress density at this orbit falls below one and cannot form a coherent state. Therefore the formation remains as a resonant conglomerate, as the asteroid belt. The subsequent planetary bodies classified as 'major planets' achieve the coherent state at a different radial level consistent with the harmonic stress states at that locality. The complete mathematical derivation based on axioms is shown in my book and provides additional proof for a Sankhya defined space.

<u>Notes:</u>

The mathematical derivation based on axioms is on my website that contains the first part of the Book on Sankhya. The second part has mathematical derivations that are new to Physics and is being verified experimentally and logically before publishing it shortly.

Earlier it was stated that velocity cannot be used as measurable parameter in a substantial medium. Velocity depends on identifying a standard unit of time such as a second as an arbitrary unit. But in a medium, movement of interactive stresses are transferred from one unit to the adjacent one and continues to transmigrate in that mode through it. As an example if a stone is

dropped into a pond, the impact displaces instantly a volume of water equal to the stone. The impulse during that instant displaces that volume of water from the centre of impact to its periphery. If that displacement rate is in excess of the normal rate of transmigration of stresses, the level of water rises simultaneously all round instead, to accommodate the excess volume within that displacement interval. Subsequently the volume of raised level of water, forming a 'wall' of water in the shape of a ring transmigrates as a wave and disperses it at its normal and constant rate of transmigration right up to its radial limit. But as the wave expands radically, its height keeps decreasing to accommodate and equalise that excess volume, as it spreads over a larger area.

The wave is a simultaneous head of water, transmigrating at its normal rate but in reality it is transporting an excess mass of water, the height of which is gradually reducing to equalise with the original level. Practically, whether the rise in height of water is 1mm or 10mm the transmigration rate remains the same, which is normally referred to as the velocity of pressure transfer in that medium. But if a calculation is carried out to derive the rate of transfer of volume in both cases the 10 mm case will result in a higher velocity of transfer, unless a hidden factor as mass, density or head is introduced into that process. These hidden factors that cannot be measured directly, like velocity, constitute the simultaneous aspect that must also be applied to phenomena in substantial space. In coherent space, density or mass identifies the simultaneous aspect of time as 'time-cubed' which cannot be measured directly but only equated to a 'constant' factor. In resonant volumes the displacement area is identified by the flux density or magnetic intensity depending on the nature of that space. In expanding volumes exceeding the transmigrating rates, the quantum of volume as a particle, photon or phonon is transferred with the time cubed factor hidden in it and which takes the place of the simultaneous transmigrating factor. In the Sankhyan mathematical derivation, the volumetric and area factors are dealt with as logarithmic values the index of which vary as the ratio of change in linear displacement distance or time interval in transmigration rates in space.

The implication of perpetual harmonic oscillatory state is that every volume of space has C cubed interactions in it always, per unit time interval (second). The orbital time in second into C cubed is the maximum stress count per harmonic cycle while the cube of radius defines the coherent state where that relative volume acts as a centred or simultaneously interactive unit. Therefore the difference in ratio between Rm (Moon's orbital radius) and RE (earth's orbital radius) gives the number of times the two volumetric ratios have changed as simultaneously interacting volumes in that orbital interval, every <u>second</u>, (because the constant rate has been evaluated in meters / second and radii have also been valued in meters.) The transmigration will take 478 seconds to regain balance if there is a disruptive change. Tm and Te are the orbital time periods of Moon and Earth.

$$\frac{Tm \times C^3}{Rm^3} = 1.7 \times 10^5 \qquad \frac{Te \times C^3}{RE^3} = 8.143 \times 10^7 \qquad \frac{Te \times Rm^3}{RE^3 \times Tm} = 478$$

Alternately

$$\frac{Te^2 \times Tm^3}{Tm^2 \times Te^3} = 478$$

Therefore the rod reacted to the change during the eclipse after approx 8 mins, when the reaction reached the earth's surface to alter angle of inclination of the centre of gravity of masses

<u>The tidal experiment.</u>

Scientists can conduct a very simple experiment to establish the structure of space as a medium that follows the laws of cause and effect, resulting in action and reaction that could be formulated through simpler mathematical rules applying combinatorial principles.

The focus of the experiment would be to show that tidal forces are caused by a physical response to other objects in the medium of space as a normal interactive reaction. Therefore the principle of gravitation would have to be restructured to accommodate a space defined in terms of an identifiable medium that is not conceived as a void, vacuum or empty of content.

The location should be in the middle of the ocean far from land masses so that the tidal rise is not affected by its contours. The Atlantic or Pacific Ocean should be chosen with a location that is close to or exactly on the equator. The experiment should be an ongoing, year long event if possible. The floating platform in the form of a boat, buoy or ship should be moored firmly in stable and permanent ground strata under the ocean. The rise and fall of the platform along with tidal variations should be monitored and controlled by a suitable mechanism to maintain the platform directly above the mooring point. The reason for that is the mooring cable or chain should remain absolutely vertical during the time of conducting the measurements so that the exact increase in height could be detected. Further the position of the Sun and/or Moon should be monitored so as to detect the instant when it is in the azimuth (directly above the platform) after correction for light travel time. The sighting of the Sun's azimuth visually puts it about 500 seconds behind the true position or the moon about a second behind. The azimuth position marks the commencement of measurement to detect the delay of the highest / lowest tidal rise / fall. The true azimuth of the Sun / Moon and the correct vertical position of the platform provide the critical accuracy in establishing the rates of stress transfer in the medium of space. The delay should vary in proportion to the changes in radial orbital distance between Earth and Sun and Earth and Moon. The detection of time difference of the maximum tidal rise & fall, individually at the nodal positions and as combined values in the intervening states would provide the needed data.

A year long reading of these factors would provide unequivocal proof of the parameters that effect the transmigration of stresses in the medium of space and the fundamental qualities of the components that form the medium. At the present level of understanding of the phenomena of gravitation there is no theoretical derivation that justifies the rise and fall of both land and water bodies on earth and which creates earthquakes and tsunamis at its extreme level. Nor is there a theoretical awareness that other planetary and stellar bodies produce the same tidal rise and fall effect on all organic, inorganic and genetic matter that affects all living entities. The eclipse experiment has shown that even a piece of wood reacts to a distant event in space.

It would also establish the exact nature of a gravitational wave that Scientists has been trying to detect. From Sankhyan theoretical logic, the mass parameter can be transferred 'instantly' across distances because the components in space act as 'rigid rod' when the duration of displacement impulses are less than 'Planck time' because the maximum interactive stress count rate in space of 3.8682436772E+35 counts/ cycle is then exceeded and the intervening distance becomes incompressible. This factor and value have been derived and written about by both Sakharov and Chandrasekhar as the metric elasticity of space. The same factor is also explained mathematically in my book part two (to be published shortly). Gravity experiments looked for 'gravitational waves' allowing for light travel time. But real gravitational waves transport mass and therefore it must transmigrate

at a rate quicker by several orders of the light travel interval. It is similar to pushing a long rigid rod from one end to move an object with mass, instantly, at the other end. Weber's gravity wave experiments showed anomalous periodicity that indicated the origin to be closer than expected. Weber must have detected extremely distant massive objects that transmigrated stress waves instantly but because of light travel time the objects may not have been identified at the inferred locations. The results of this experiment could also provide the thoretical foundation to amalgamate General and Special theory of Relativity and prove that the constancy of perpetual harmonic oscillatory rate forms the standard for comparison of relativistic phenomena and not velocity of light. It has the potential to establish the correct scientific and mathematical theory that will solve the puzzle of the 'Doppler shift with distance' phenomena when sighting distant Cosmological events. In closing I would like to reiterate that Sankhya is founded on axiomatic logic using simple counting methods to establish the natural laws that make phenomena function and is a purely intellectual derivation.