(Mr. Kiran Kumar, Dr. M. Annadorai.) cc. (Dr. Karnik ISRO), (PMO). (S-Vyasa Dr. Nagendra). (Dr.V. Bhatkar). (Dr.M.Srinivasan). (Mr. Ramadorai) (Dr. J. Narlikar). (Dr. Thanu Padmanabhan). (Suggest names for relevant scientists?)

Reference: ISRO seeking proposals for Mars Orbiter Mission-2

ISRO: A proposal in principle to conduct a significant experiment on Mars was sent some time ago to Dr. Radhakrishnan who was Chairmen then, but since he retired it has not been followed up. Now that the government has requested for scientific projects to be carried out on Mars Orbiter Mission 2. I am sending a modified proposal that could enable ISRO to establish new findings that would change the mode of operation in space as its fundamental characteristics have been derived axiomatically in Sankhya, with precision and theoretical proof.

Reference documents: The complete axiomatic theory from Vedic Science identified as Sankhya and composed by Kapillamuni, forming the core of the Bhagavadgita is the source and is detailed in the book "Secret of Sankhya: Acme of Scientific Unification,". The book along with numerous supporting papers, are on website www.kapillavastu.com and has been validated with a certificate from S-Vyasa University Bangalore. The necessary reference documents for this paper are mentioned and attached but additional background theoretical details of its unique axiomatic derivation, complete with internal proof can be accessed from the website.

Abstract: Sankhya is an axiomatic theory, using the unique principle of self-similarity and scale invariance. It is derived as a dimensionless combinatorial mathematical theory using numerical ratios. Sankhya is based on comparative counting of interactive oscillatory cycles through a perpetual harmonic oscillator that forms the basic oscillation frequency and is mathematically proved to be a universal constant. Briefly, the equivalent of the standard model in Physics are the Purusha singularity, Mahad as Plank mass, Prakriti as Hadronic nucleus, Vikriti as leptonic Electron, Vriti as Neutrino, the transmigrating stress quanta, Vikharo as radiant photon and Moolaprakriti the elemental quantum in space. Hence all numerals are ratios of the elemental quantum and have the numerical unit 1 when applicable in the denominator but are not shown specifically. Space is axiomatically defined in terms of the dynamic interactive ratio compared to the constant oscillatory rate C, perpetual harmonic interactive state PHO forming the cornerstone of eternal dynamism, gravitational constant G, space metric elasticity ST, Planck coherent density Dp, resonant nuclear density Pd and harmonic space density DD, all of which interactively balance dynamism in space maintain a stable continuum, as the foundation for all forms of manifestation. The only variable, interactive cycle duration as oscillatory count ratios, in three identified modes. accounted for all the dynamic states of manifestation that are maintained in perpetual balance. Hence all detectable phenomena are necessarily confined to the three measurable states of coherence, resonant and harmonic states because it remains in a stable configuration at calculated intervals. All other states are in relative movement and cannot be measured correctly though it can be calculated to exist for extremely small intervals. Further, axiomatic derivations have consistently given correct and precise results because only one dynamic interactive algorithm is used in solving all scientific equations shown below with axiomatically derived data. Proofs are provided on website.

Important note. In Sankhya all formulations have precise solutions and these are shown so that it can be understood at a glance.

Important note. In Sankhya all formulations have precise solutions and these are shown so that it can be understood at a glance.
$$x:=\frac{\sqrt{1+2^2}-1}{2}\quad x=0.61803\quad C:=10^{\frac{2}{x^3}}\quad C=2.96576\times 10^8\quad Kx=0.91499 \quad Px=20.94799 \quad k=1.25992$$
 PlanckMass
$$M_{PS}:=\frac{Kx\cdot 7\cdot rs}{C}\quad M_{PS}=2.20369\times 10^{-8}\quad \text{Nuclear mass}\quad PM:=\frac{Kx}{Px\cdot C^3}\quad PM=1.67442\times 10^{-27}$$
 Neutron mass
$$P_{n}=1.67493\times 10^{-27}\quad \text{Proton mass}\quad P_{m}=1.67262\times 10^{-27}$$
 Lepton1 mass
$$M_{ep}=9.11406\times 10^{-31}\quad \text{Lepton2 mass}\quad M_{e}=9.11023\times 10^{-31}\quad \text{Electron mass}\quad M_{e}=9.10938\times 10^{-31}$$
 Coherent quantum Thama
$$R_{esonant} = \frac{1.67493\times 10^{-31}}{1.23\times 10^{-31}}\quad R_{esonant} = \frac{1.67493\times 10^{-31}}{1.23\times 10^{-31}}$$

Harmonic quantum Sathwa

$$\frac{Mps}{PM \cdot Px \cdot C^2} = 7.142857 \qquad (1+1)^3 - 1 + \frac{1}{(1+1)^3 - 1} = 7.142857 \qquad \frac{PM - Pm}{Pn - PM} + \frac{Mep - Me}{(Me - Mee) \cdot k} = 7.142857$$

Sankhya is the only axiomatic theory in existence and all manifestation is created dynamically by one single algorithm as: PHO state = Coherent state = Resonant state + Harmonic state. = Three Gunas in Sanskrit.

The website www.kapillavastu.com contains the complete book plus appendix, articles, experiments, devices and proof.

PROJECT REQUEST TO ISRO: (13-12-2016)

Experiment 1:

To measure frequency or oscillatory cycle of EMW of 1 meter wavelength on Mars and other planets if and when possible for it would be different on each planet as predicted in Sankhya and confirmed on Earth. Experimental confirmation on other planets will prove that space is dynamic with precise density DD and metric elasticity ST, values which have been derived axiomatically in Sankhya but not measured or derived so far in science.

Experiment 2:

To test and confirm the principle of levitation in dynamic space with density DD and metric elasticity ST, by spinning mercury at above 40000 rpm, in the mode described below.

Experiment 1 Details:

The axiomatic theory of SANKHYA predicts that the frequency of electromagnetic wave of 1 meter wavelength received on each planet varies with the ratio of change in distance that is proportional to the logarithmic change in potential, at its source.

The fundamental oscillatory rate derived axiomatically is C = 29675967 cycles per axiomatic cycle in space, and forms the Universal constant in the EMW, thermal and gravitation fields in space... The figures below show the variation in frequency from C in cps for Earth. The velocity of light as c = 299792458 m/sec is derived axiomatically as c = 299792458 m/sec is derived axiomaticall

(Please refer to the attached Abstreview pdf and / or website for details of axiomatic derivations)

Earth:

Axiomatic values.

Harmonic Resonant constant
$$x:=\frac{\sqrt{1+2^2-1}}{2}$$
 $x=0.618034$ $C:=10^{\frac{2}{x^3}}$ $C=2.96576\times 10^8$ $Rs:=\left(\frac{7\cdot rs}{2}\right)^{\frac{2}{3}}\cdot C$ $Rs=6.929426\times 10^8$ EARTH $Rs=6.929426\times 10^8$ $P_3=1.492836\times 10^{11}$ $c_3=2.997925\times 10^8$ $c_3-C=3.216491\times 10^6$ $\frac{c_3}{C}=1.010845$ $\frac{Rs}{c_3-C}=215.434333$ $\frac{P_3}{Rs}=215.434333$ $\frac{P_3\cdot (c_3-C)}{Rs^2}=1$

The axiomatic derivation of C is shown above. The value of c given above is the standard Michelson & Morley et al measured <u>velocity</u> in meters / second of electromagnetic waves on the Earth and is deemed a universal constant. c3 has the same numerical <u>frequency</u> value, for a meter wavelength, in cycles per second and is derived axiomatically as c3.

On the Earth the differential value of c – C is 3216491 meters, (as each cycle corresponds to I meter wavelength). The Rs is the axiomatic Solar radius and P3 the Earth measured orbital radius, both in meters and has been taken from standard published values. The ratio Rs / Δ C equals ratio P3 / Rs exactly and demonstrate the existence of a new principle that space must be defined using density DD and metric elasticity ST as predicted in Sankhya. The equations using both DD and ST are exactly proportionate to the same ratio, thereby establishing an accurate mathematical validity to the Sankhyan derivation. The absolute temperature factor as the volume change ratio Ka confirms the thermal characteristics too in space.

$$Ne = 9.528734 \times 10^{-35} DD = 3.631115 \times 10^{-25} ST = 3.868244 \times 10^{35} G = 1.48288 \times 10^{10} Ka = 272.23928 \left(1 + \frac{1}{Ka}\right)^2 = 1.00736$$

$$\left[\frac{\left(c_3 - C\right) \cdot P_3}{Rs} \cdot \frac{Ne}{DD}\right] \cdot \left(\frac{7 \cdot rs}{2}\right)^{\frac{4}{3}} \cdot \left(1 + \frac{1}{Ka}\right)^2 = 0.999999 \cdot \left[\frac{\left(\frac{c_3 - C}{Rs}\right) \cdot P_3}{Rs} \cdot \frac{Ne}{1 + \frac{2}{s^3}} \cdot \frac{ST}{G}\right] \cdot \left(\frac{7 \cdot rs}{2}\right)^{\frac{4}{3}} \cdot \left(1 + \frac{1}{Ka}\right)^2 = 0.999999 \cdot \left[\frac{\left(\frac{c_3 - C}{Rs}\right) \cdot P_3}{Rs} \cdot \frac{Ne}{1 + \frac{2}{s^3}} \cdot \frac{ST}{G}\right] \cdot \left(\frac{7 \cdot rs}{2}\right)^{\frac{4}{3}} \cdot \left(1 + \frac{1}{Ka}\right)^2 = 0.999999 \cdot \left[\frac{\left(\frac{c_3 - C}{Rs}\right) \cdot P_3}{Rs} \cdot \frac{Ne}{1 + \frac{2}{s^3}} \cdot \frac{ST}{G}\right] \cdot \left(\frac{7 \cdot rs}{2}\right)^{\frac{4}{3}} \cdot \left(1 + \frac{1}{Ka}\right)^2 = 0.999999 \cdot \left[\frac{\left(\frac{c_3 - C}{Rs}\right) \cdot P_3}{Rs} \cdot \frac{Ne}{1 + \frac{2}{s^3}} \cdot \frac{ST}{G}\right] \cdot \left(\frac{7 \cdot rs}{2}\right)^{\frac{4}{3}} \cdot \left(1 + \frac{1}{Ka}\right)^2 = 0.999999 \cdot \left[\frac{1}{s^3}\right] \cdot \left(\frac{1 + \frac{1}{Ka}}{Rs}\right)^2 = 0.999999 \cdot \left[\frac{1}{s^3}\right] \cdot \left(\frac{1 + \frac{1}{Ka}}{Rs}\right)^2 = 0.999999 \cdot \left[\frac{1}{s^3}\right] \cdot \left(\frac{1 + \frac{1}{Ka}}{Rs}\right)^2 = 0.9999999 \cdot \left[\frac{1}{s^3}\right] \cdot \left(\frac{1 + \frac{1}{Ka}}{Rs}\right)^2 = 0.99999999 \cdot \left[\frac{1}{s^3}\right] \cdot \left(\frac{1 + \frac{1}{Ka}}{Rs}\right)^2 = 0.9999999 \cdot \left[\frac{1}{s^3}\right] \cdot \left(\frac{1 + \frac{1}{Ka}}{Rs}\right)^2 = 0.999999 \cdot \left[\frac{1}{s^3}\right] \cdot \left(\frac{1 + \frac{1}{Ka}}{Rs}\right)^2 = 0.9999999 \cdot \left[\frac{1}{s^3}\right] \cdot \left(\frac{1 + \frac{1}{Ka}}{Rs}\right)^2 = 0.999999 \cdot \left[\frac{1}{s^3}\right] \cdot \left(\frac{1 + \frac{1}{Ka}}{Rs}\right)^2$$

Similarly the same proportionality of the ratio Rs / Δ C exists on every Planet too and applies with equal validity to all variations in gravitational equations; It is shown in the table below as proof.

Michelson's experimental results of the value of C3 = 299792458 m/s (equal to frequency at a meter wavelength), has not only provided mathematical proof to defining space with density DD and metric elasticity ST but also set the logic for new and path breaking innovations. The same equations apply to all planets, as shown below. Hence experimental reconfirmation of the C3 value will lead to the validation of the axiomatic derivation.

MARS
$$x := \frac{\sqrt{1+2^2-1}}{2}$$
 $x = 0.618034$ $C := 10^{\frac{2}{x^3}}$ $C = 2.96576 \times 10^8$ $c_4 = 2.986831 \times 10^8$ $c_4 - C = 2.107117 \times 10^6$ MARS $R_5 = 6.929426 \times 10^8$ $P_4 = 2.278798 \times 10^{11}$ $c_4 = 2.986831 \times 10^8$ $c_4 - C = 2.107117 \times 10^6$ $\frac{c_4}{C} = 1.007105$ $\frac{R_5}{c_4 - C} = 328.85815$ $\frac{P_4}{R_5} = 328.85815$ $\frac{P_4 \cdot (c_4 - C)}{R_5^2} = 1$

The Mars c4 = 2.986831 x10^8 frequency/second value of the one meter wavelength as shown above will be different from that received on Earth. On Mars therefore Δ C value will also be different to the one on the Earth. The Rs is Solar radius and P4 the Mars orbital radius, both in meters. Shown above and confirmed below is the exact equivalence of ratio Rs / Δ C to P4 / Rs, similar to the equivalence on Earth. The equations below confirm that the Δ C factor is not an accidental event.

$$Ne = 9.528734 \times 10^{-35} DD = 3.631115 \times 10^{-25} ST = 3.868244 \times 10^{35} G = 1.48288 \times 10^{10} Ka = 272.23928 \left(1 + \frac{1}{Ka}\right)^2 = 1.00736$$

$$\left[\frac{\left(c_4 - C\right) \cdot P_4}{Rs} \cdot \frac{Ne}{DD}\right] \cdot \left(\frac{7 \cdot rs}{2}\right)^{\frac{4}{3}} \cdot \left(1 + \frac{1}{Ka}\right)^2 = 0.999999 \, \text{I} \quad \left[\frac{\left(c_4 - C\right) \cdot P_4}{Rs} \cdot \frac{Ne}{1 + \frac{2}{x^3}} \cdot \frac{ST}{G}\right] \cdot \left(1 + \frac{1}{Ka}\right)^2 = 0.999999 \, \text{I} \quad \left[\frac{\left(c_4 - C\right) \cdot P_4}{Rs} \cdot \frac{Ne}{1 + \frac{2}{x^3}} \cdot \frac{ST}{G}\right] \cdot \left(1 + \frac{1}{Ka}\right)^2 = 0.999999 \, \text{I} \quad \left[\frac{\left(c_4 - C\right) \cdot P_4}{Rs} \cdot \frac{Ne}{1 + \frac{2}{x^3}} \cdot \frac{ST}{G}\right] \cdot \left(1 + \frac{1}{Ka}\right)^2 = 0.999999 \, \text{I} \quad \left[\frac{\left(c_4 - C\right) \cdot P_4}{Rs} \cdot \frac{Ne}{1 + \frac{2}{x^3}} \cdot \frac{ST}{G}\right] \cdot \left(1 + \frac{1}{Ka}\right)^2 = 0.999999 \, \text{I} \quad \left[\frac{\left(c_4 - C\right) \cdot P_4}{Rs} \cdot \frac{Ne}{1 + \frac{2}{x^3}} \cdot \frac{ST}{G}\right] \cdot \left(1 + \frac{1}{Ka}\right)^2 = 0.999999 \, \text{I} \quad \left[\frac{\left(c_4 - C\right) \cdot P_4}{Rs} \cdot \frac{Ne}{1 + \frac{2}{x^3}} \cdot \frac{ST}{G}\right] \cdot \left(1 + \frac{1}{Ka}\right)^2 = 0.999999 \, \text{I} \quad \left[\frac{\left(c_4 - C\right) \cdot P_4}{Rs} \cdot \frac{Ne}{1 + \frac{2}{x^3}} \cdot \frac{ST}{G}\right] \cdot \left(1 + \frac{1}{Ka}\right)^2 = 0.999999 \, \text{I} \quad \left[\frac{\left(c_4 - C\right) \cdot P_4}{Rs} \cdot \frac{Ne}{1 + \frac{2}{x^3}} \cdot \frac{ST}{G}\right] \cdot \left(1 + \frac{1}{Ka}\right)^2 = 0.999999 \, \text{I} \quad \left[\frac{\left(c_4 - C\right) \cdot P_4}{Rs} \cdot \frac{Ne}{1 + \frac{2}{x^3}} \cdot \frac{ST}{G}\right] \cdot \left(1 + \frac{1}{Ka}\right)^2 = 0.9999999 \, \text{I} \quad \left[\frac{\left(c_4 - C\right) \cdot P_4}{Rs} \cdot \frac{Ne}{1 + \frac{2}{x^3}} \cdot \frac{ST}{G}\right] \cdot \left(1 + \frac{1}{Ka}\right)^2 = 0.9999999 \, \text{I} \quad \left[\frac{\left(c_4 - C\right) \cdot P_4}{Rs} \cdot \frac{Ne}{1 + \frac{2}{x^3}} \cdot \frac{ST}{G}\right] \cdot \left(1 + \frac{1}{Ka}\right)^2 = 0.9999999 \, \text{I} \quad \left[\frac{\left(c_4 - C\right) \cdot P_4}{Rs} \cdot \frac{Ne}{1 + \frac{2}{x^3}} \cdot \frac{ST}{G}\right] \cdot \left(1 + \frac{1}{Ka}\right)^2 = 0.9999999 \, \text{I} \quad \left[\frac{\left(c_4 - C\right) \cdot P_4}{Rs} \cdot \frac{ST}{G}\right] \cdot \left(1 + \frac{1}{Ka}\right)^2 + \frac{1}{A} \cdot \frac{ST}{G} \cdot \frac{ST$$

The two equations show that like the Earth, Δ C Mars too has both DD and ST exactly proportionate to the same ratios, thereby establishing an accurate mathematical validity to the Sankhyan derivation. It is extremely important and vital to confirm the C4 = 2.9868246 x10^8 on Mars, the ratio on Mars is C4 / C = 1.007105 as derived in the same way as Earth's ratio C3 / C0 = 1.010845.

Analysis of the past scientific findings on Space characteristics, which provide an important reason to conduct these experiments.

As an analogy, the characteristics of space are similar to the thermodynamic behavior of gases but not identical because all particles are dynamically quantized coherent holographic states in the continuum of space, with 4 precise parameters governed by axiomatic principles of self similarity and scale invariance.

The constant resonant oscillatory rate C ensures balance of the PHO interactive stresses that remain at DD in the coherent state and any local change cannot exceed the boundary ST harmonic state. All manifestation in the intervening field are holographic states of oscillatory stresses that quantize into larger fields without any change in the basic space parameters. The mathematical proportionality formulation on all nine planets is given below in brief and is treated exhaustively in Abstreview.pdf on website.

$$c_{z} \coloneqq 10^{\frac{2}{3}} + \left(\frac{TR_{z}}{To}\right)^{\frac{-2}{3}} \\ Rs \coloneqq \left(\frac{7 \cdot rs}{2}\right)^{\frac{2}{3}} \cdot C \qquad P_{z} \coloneqq \frac{Rs^{2}}{c_{z} - C} \qquad Rs = 6.929426 \times 10^{8} \qquad C = 2.96576 \times 10^{8} \\ c_{3} = c_{z} = \frac{c_{z}}{C} = \frac{Rs}{c_{z} - C} = \frac{P_{z}}{Rs} = c_{z} - C = \frac{Rs^{2}}{(c_{z} - C) \cdot P_{z}} \\ \frac{1.017225}{1.004134} = \frac{1.028258}{1.0043919108} = \frac{1.028258}{1.015025} = \frac{1.015025}{155.510383} = \frac{1.028258}{155.510383} = \frac{1.015025}{155.510383} = \frac{1.015025}{125.434333} = \frac{1.0011717 \cdot 10^{6}}{125.086512} = \frac{1.0011717 \cdot 10^{6}}{125.086512} = \frac{1.001132}{125.086512} = \frac{1.000564}{125.086512} = \frac{1.$$

The equivalence of the Δ C proportionality on all planets (shown above) is a compelling factor that proves space has defined and identifiable properties that are totally balanced by the constant C, DD and ST parameters. To reiterate, confirming it unequivocally will allow space technology to create a paradigm shift that will lead to important advancement in space science a few of which are listed below. It also provides logical mathematical solutions to a number of unsolved anomalies identified in space. The ratio cz / c3 has been shown only to confirm the c3 as the Michelson Morley value does not display the proportionality factor.

The derivation above should not come as a complete surprise. The space dynamic density DD was identified in GR, by Einstein, to balance the gravitational equations at the boundary of space, so that "zero curvature" formalism would overcome the negative results of the Michelson Morley experiments, which did not confirm its dedicated purpose of exposing the foundation of space as a definable entity. The GR equation below was expected to give a "zero" solution, by using the correct expansion and density parameters.

$$\frac{1}{3} \cdot \left(\mathbf{K} \rho - \mathbf{H}^2 \right) > 0 \qquad \left[\frac{1}{3} \cdot \left(\mathbf{K} \rho - \mathbf{H}^2 \right) \right] < 0 \qquad \rho = \frac{3 \cdot \mathbf{H}^2}{K} = 3.5 \cdot 10^{-28} \qquad \frac{gms}{cm^3} \qquad \text{Sankhya} \quad DD = \frac{1 + \frac{2}{3}}{C^3} = 3.63112 \times 10^{-25} \quad \frac{kg}{m^3} = \frac{1}{3} \cdot \left(\frac{1}{3} \cdot \left($$

The axiomatic Sankhya density DD and the GR's ρ are close enough. Hubble's observation of H as the expansion factor was based on two assumptions that space was a void, post Michelson's experiment and the vacuous space boundary was assumed to have three possibilities of closing in, expanding indefinitely and if neither, a stable state that resulted in a zero differential in the GR equation. Even the Hubble's expansion constant used in the GR equation has changed its value by about 50% from the original one and that uncertainty needs an explanation.

Hubble's expansion hypothesis, ostensibly valid even today, is a misinterpretation of an axiomatic balancing phenomena that maintains Pho, C, DD and ST all of which remained constant perpetually through the proportionality of Δ C . The density DD, the metric elasticity of boundary as ST, the Sankhyan gravitational constant G as the reciprocal of Newtonian G and TT the axiomatic harmonic expansion constant replacing Hubble's H, are shown below in precise balance thus providing a dynamic but stable continuum forming space.

$$\frac{G}{TT^2 \cdot DD} = 1 \qquad \frac{TT^2 \cdot \left(1 + \frac{2}{3}\right)}{ST} = 1 \qquad \frac{DD \cdot ST}{G \cdot \left(1 + \frac{2}{3}\right)} = 1$$

In the foregoing background, It becomes imperative to resolve this anomaly through the Sankhyan axiomatic derivations. Hubble's observation of a change in wavelength and frequency as a red shift, proportional to distance, was compared with c3 not C for the latter is still unknown.

Taking Mars $^{c_4-C} = 2.107117 \times 10^6$ becomes a blue shift but with $^{c_3} = -1.109374 \times 10^6$ it turns into a red shift with a negative sign. The fact that $^{c_3} = -1.109374 \times 10^6$ it turns into a red shift with a negative sign. The fact that $^{c_3} = -1.109374 \times 10^6$ it turns into a red shift with a negative sign. The fact that $^{c_3} = -1.109374 \times 10^6$ it turns into a red shift with a negative sign. The fact that $^{c_3} = -1.109374 \times 10^6$ it turns into a red shift with a negative sign. The fact that $^{c_3} = -1.109374 \times 10^6$ it turns into a red shift with a negative sign. The fact that $^{c_3} = -1.109374 \times 10^6$ it turns into a red shift with a negative sign. The fact that $^{c_3} = -1.109374 \times 10^6$ it turns into a red shift with a negative sign. The fact that $^{c_3} = -1.109374 \times 10^6$ it turns into a red shift with a negative sign. The fact that $^{c_3} = -1.109374 \times 10^6$ it turns into a red shift with a negative sign. The fact that $^{c_3} = -1.109374 \times 10^6$ it turns into a red shift with a negative sign. The fact that $^{c_3} = -1.109374 \times 10^6$ it turns into a red shift with a negative sign.

orbital distances became larger, the Δ C increased when compared to C3, whereas it decreased with C. The anomalous red shift increasing with distance did create an intellectual dichotomy that compelled logic to be compromised. The error is shown in the tabulation below on all nine planets, for it is very logical that in the planetary domain only a blue shift can occur when EMW radiation is received from the SUN, through space with identified characteristics.

Potential ratio variance with orbital distance	BLUE SHIFT correct value	Differential decreasing with orbital distance	Differential increasing with distance but is negative after c3	REDSHIFT incorrect value Hubble effect
$\frac{c_z}{C} =$	$\frac{\left(c_{z}-C\right)}{C}+1=$	$c_z - C =$	$(c_z - c_3) =$	$\frac{\left(\left(c_{z}-c_{3}\right)\right)}{c_{3}}+1$
1.028258	1.028258	8.380558-106	5.164067·10 ⁶	1.017225
1.015025	1.015025	4.455925·10 ⁶	1.239434·10 ⁶	1.004134
1.010845	1.010845	3.216491·10 ⁶	0	1
1.007105	1.007105	2.107117·10 ⁶	-1.109374·10 ⁶	0.9963
1.002077	1.002077	6.159016·10 ⁵	-2.600589·10 ⁶	0.991325
1.001132	1.001132	3.358521·10 ⁵	-2.880639·10 ⁶	0.990391
1.000564	1.000564	1.671757·10 ⁵	-3.049315·10 ⁶	0.989829
1.00036	1.00036	1.069146·10 ⁵	-3.109576·10 ⁶	0.989628
1.000273	1.000273	8.105255·104	-3.135439·10 ⁶	0.989541

Further since no oscillatory rate less than the axiomatic constant C can exist, all light or EMW waves, from any source, however far it may be, must be blue shifted, because a change in potential is a must to initiate momentum in a continuum with DD and ST as operating parameters. In Sankhya the potential ratio is identified as the PHO oscillatory quantum state of 7rs = 7.142856, shown in the abstract, which defines that radiation can only occur from solar radius that is greater than Rs, as the PHO state is the potential, radiating the quanta as waves (shown in the derivation). Another factor that affects such measurement is the angle of incidence, for the present dichotomy in Physics is that quanta behave both as particle and wave to the observer. In Sankhya the stresses are quantised by the PHO oscillatory state and transferred as waves of stress in the form of Neutrinos with specific mass, accelerated by Δ C through a space operated by DD and ST parameters.

In GR the introduction of a Cosmological constant was abandoned by Einstein because the Hubble expansion parameter apparently satisfied his GR equation. However Sankhya derivation has axiomatically derived the precise Cosmological constant' with numerical ratio MY (shown as **my** in equations) that satisfies every equation precisely and permanently. MY is the smallest mass in space and is proportional to the energy quantum, photon or Planks constant h. Similarly Ne the neutrino mass is h / 7 where Tc is the coupling constant.

Moolaprakriti = my =
$$\frac{Kx}{C^6}$$
 = 1.34462 × 10⁻⁵¹ $\frac{h}{my \cdot C^2} \cdot \frac{7}{(2 \cdot \pi)^2} + \left(\frac{1}{Tc}\right) = 1$ $\frac{h}{Ne \cdot 7} + \frac{1}{Tc} = 1$

The vital importance of My (my) as the cosmological constant is proved by closing the equation of the Plank Mass Mps (the maximum mass of a fundamental particle) which relationship has never been exposed in Quantum Mechanics. The proof that Einstein looked for is given below where the Cosmological constant MY controlled all dynamism in space accurately. Expanding that equation will show that the observable Universal boundary is stable and precise with a permanent value shown as RU = 5.99334 e+25 meters or 6.4 billion light years in the Abstreview pdf derivation. Hence both the GR solution and the expansion uncertainty are resolved through precise axiomatic mathematics and eliminated the need to estimate values in balancing the GR equation. In principle, the need for a Cosmological constant to balance the GR equation has proved correct while preserving the logical integrity of the GR equations. Further it preserves the SR conclusions by eliminating the need for contraction of rod and slowing of clock, as the frequency is the actual constant.

The above equation balanced by the Cosmological constant MY shows it is stable in all the nine planetary orbital radii values because it is less than the radiation coupling constant 1.006584, else the orbit would have decayed. The Δ C value beyond Pluto's orbital radius reaches zero and decays thereafter, which is supported by the fact that no planetary bodies have been detected so far. The formulation given below, as a more compelling theoretical derivation, displays constant equality in every combination of factors operating in space. Mps is Planck mass, Lp is Planck length, h is Planck's constant, Dp is Planck density and G the Sankhyan equivalent of Newtonian G, DD is space density or GR's ρ , ST is metric elasticity of space, Tc coupling constant, 9.4721 is the coherent state potential for stress transmission of Ne.

All values below have been axiomatically derived as dimensionless ratios from basics and details on website.

$$\begin{split} \text{Mps} &= 2.203694 \times 10^{-8} \quad \text{Lp} = 1.68956 \times 10^{-35} \quad \text{G} = 1.48288 \times 10^{10} \quad \text{my} = 1.34462 \times 10^{-51} \quad \text{DD} = 3.631115 \times 10^{-25} \\ \text{ST} &= 3.868244 \times 10^{35} \quad 1 + \frac{1}{\text{Tc}} = 1.006584 \quad 1 + \frac{2}{x^3} = 9.472136 \quad \text{C} = 2.96576 \times 10^8 \\ \frac{\text{Mps}}{\text{Lp}^3 \cdot \text{Dp}} &= 1 \quad \frac{\text{Mps}}{\text{Lp}^2 \cdot \text{G}} \cdot \frac{\text{my}}{7} = 1 \quad \frac{\text{Mps}}{\text{Lp} \cdot \text{G}} \cdot \frac{\text{my}}{\text{h}} \cdot \frac{\left(2 \cdot \pi\right)^2}{7 \cdot \left(1 + \frac{1}{\text{Tc}}\right)} = 1 \quad \frac{\text{Mps}}{\text{Lp} \cdot \text{G}} \cdot \frac{\text{my}}{\text{Ne}} \cdot \left(\frac{2 \cdot \pi}{7}\right)^2 = 1 \quad \frac{\text{Mps} \cdot \text{C}}{\text{Lp} \cdot \text{ST}} = 1 \quad \frac{\text{Mps} \cdot \text{C}}{\text{Lp} \cdot \text{G}} \cdot \frac{\text{DD}}{1 + \frac{2}{x^3}} = 1 \end{split}$$

The equations above show two very significant equality and proportionality between Quantum Mechanics and General Relativity. MY and Ne and h closes the maximum mass equation, which, in the current understanding of the quark structure, is mathematically not possible. Next, the acceleration factor in the second expression, at the Planck level,

$$\frac{\text{Mps}}{\text{Lp}^2 \cdot \text{G}} = \frac{7}{\text{my}} = 5.205931 \times 10^{51}$$

is a colossal value confining the fundamental quantum 7 in a potentially dynamic state precisely and is defined as the elemental Purusha state in Sankhya and Vedic science.

Similarly the thermal spectrum has its source in DD though it has not been derived in those terms in Physics. The Boltzmann constant Is a direct derivative of DD as shown below with the confirmation of the "absolute temperature" as the linear rate of volume change:

$$\frac{\text{DD}}{\left[\frac{\text{PM} - \text{Pm}}{\text{Pn} - \text{PM}} + \frac{\text{Mep} - \text{Me}}{(\text{Me} - \text{Mee}) \cdot \mathbf{k}}\right]} \cdot \frac{7^3}{\mathbf{k}} = 1.383945 \times 10^{-23}$$

$$\frac{7^3}{\mathbf{k}} = 272.23928$$

$$1 + \frac{\mathbf{k}}{7^3} = 1.00367$$

The corner stone of GR was the equivalence of inertial mass and gravitational mass. From the foregoing consistent equality of the equations show that mass IS the number of oscillatory states in one cycle. The neutrino stress transfer rates created both the "types of masses" at the same instant because there is only one dynamic PHO state to initiate it. Demonstrating the equivalence of GR and Quantum theory is a hallmark in unification brought about by the axiomatic derivations in Sankhya. Therefore the foregoing provides extremely compelling reasons to confirm with many correct experimental results. Since the experiments are critically important, several important equations have been shown here again, to enable comparisons at a glance, though detailed derivations are on the website and attached papers. It is even more imperitive as all the masses of all stable particles are derived from basics in Sankhya with accuracy equal ro those values measured and recorded in Physics. Perhaps it may be important to reiterate that axiomatic derivation of all masses from basics is impossible with present concepts in Scence. (mass.pdf on website).

Experiment 2 Details:

Abstract: The continuum of space as detailed above comprises neutrinos, as stress quanta, communicating the interactive density changes at rate C as gravitational acceleration from the interactive PHO state, balanced by the density DD and metric elasticity ST. The DD value is 216 times the nuclear particle Neutron Pn or nuclear boson PM or Proton Pm mass. The product of PHO ratio and Neutrino too equal the DD value at oscillatory rate C. Mercury is about 200 times Pm or the Proton mass and by increasing its oscillatory rate to equal DD, that is about 216 times PM, it will levitate in space. The fundamental reason is space is a medium of dynamic neutrino states and has buoyancy characteristics like any other medium as air or water. Space is real and substantial not a void because, its balanced state C, absorbs stresses below 7 Ne mass. That is the important reason why Neutrinos have not been DETECTED in any experiment. The DD state is the consequence of the absorption characteristic which provides a logical mathematical answer to a host of anomalies in space, one of which shown above, is the blue shift factor, The foregoing explanation will highlight the fact

that the recommended experiments have a very a theoretical, logical and precise background based on axioms, to compel us to carry it out and provide further proof. Moreover the experiments are simple and easy to carry out,

<u>Analysis</u>: Any metal disc spun at high speed displays gyroscopic effects. As a result any force applied to the axle reacts at an angle proportional to the momentum and direction that is not expected. In real terms, gyroscope effects are more complex and known mathematical models do not accurately reflect the actual motions. Analysis of forces acting on a gyroscope shows that four dynamic force components, as known now, act simultaneously: the centrifugal, inertial, Coriolis and the rate of change of force in angular momentum, of the spinning rotor. In short the rigidity of the material determines the delay in reaction. But spinning fluids react in predictable time and modes as all the created forces are free to regain balance in flexible ways. While the mathematics of vortex creation is complex, its behavior is free from mathematical anomalies.

<u>Details:</u> In space, the continuum of stress quanta, comprising neutrinos, behave (as shown above,) in predictable ways. As an analogy a flat spinning disc in air or water does not create a lift or thrust whereas a propeller or helicopter blades do. The reason is that the static pressure in the medium, acting as a potential, creates a balancing force when disrupted.

Similarly the neutrino field in space, the medium through which gravity acts everywhere, when disturbed, will likewise create a force to regain balance. The important fact to understand is that neutrinos, being stress quanta, can pass through barriers, like sound waves across a panel. Gravity cannot be shielded. But when stresses accelerated it is transferred and, resistance builds up. As shown in the Planet orbit case, Δ C increases the C value when higher potential neutrinos transmigrate to the lower C value.

As seen in the foregoing derivations, the dynamic state of space remains at the PHO level of 7.1428 value, when in balance. When any local accelerative event is created, which raises stresses above its normal rate Cz, the increase will provide an accelerative force or thrust. The axiomatic theory predicts that gases and liquids will react but not solids due to its rigidity. Hence spinning a liquid beyond a threshold value will create a force in the neutrino field. The formula below shows that Mercury with atomic weight 200 needs above 40000 RPM to overcome the density DD parameter. Two methods of derivation are shown below. Overcoming DD requires 39000 RPM to create the volume of Ne states to increase adequately, for the temperature factor of 1/272 ($k/7^3$) volume changes, must also be exceeded. The other mode shown in three steps, need the PM boundary radius to expand by increasing the Δ C factor by 5.847, logarithmically, as a potential or mass increase ratio. These experiments should be conducted on Earth first to verify the equipment function and the lift factor. The first expression shows the equivalence of DD, which is the limiting parameter. The second shows that the Mercury atoms providing the thrust are due to the buoyancy factor (or Δ C cubed) above 39000 RPM.

$$\frac{\left[\left[\left[\frac{PM-Pm}{Pn-PM}+\frac{Mep-Me}{(Me-Mee)\cdot k}\right]\right]^{2}\cdot C\right]\cdot \left(1+\frac{k}{7^{3}}\right)^{2}\cdot Ne}{DD} = 1 \cdot \left[\frac{\left[\frac{PM-Pm}{Pn-PM}+\frac{Mep-Me}{(Me-Mee)\cdot k}\right]^{2}\cdot Ne}{2}\cdot Ne\right]^{\frac{1}{3}}\cdot Ne - \frac{1}{3}\cdot Ne - \frac{$$

The next formulation shows, the creation of Δ C by extending the atomic boundary radius sufficiently, to increase the potential of the gravity field by a factor of 5.848 which raises it by a ratio of about 1.4 times.

Ratio of change in radius proportional to Mercury / PM
$$\left(\frac{Pn \cdot 120 + Pm \cdot 80 + Mee \cdot 80}{PM} \right)^{\frac{1}{3}} = 5.847973$$
 Ratio of change of DD proportional to Mercury
$$\left[\frac{DD}{(Pn \cdot 120 + Pm \cdot 80 + Mee \cdot 80)} \right]^{\frac{1}{3}} = 1.027353$$
 Increase in oscillatory aa a log ratio from C
$$10^{\frac{2}{3} + \frac{1}{5.847973}} = 4.396786 \times 10^{8}$$
 RPM required to equalise with Mercury / PM ratio
$$\left(\frac{2}{3} + \frac{1}{5.847973} \right)^{\frac{1}{3}} = 1.027353$$
 RPM required to equalise with Mercury / PM ratio
$$\left(\frac{2}{3} + \frac{1}{5.847973} \right)^{\frac{1}{3}} = 1.027353$$

Mercury must be spun within the container which should be at rest. Rotating the rigid container will destroy the flexibility needed to create a lift or thrust. Electro-magnetic or thermodynamic methods of creating spin will not be suitable with Mercury.

<u>Method:</u> A special method is needed to spin the mercury within a stationery container. High pressure air or inert gas must be injected tangentially through at least two fine nozzles or needle jets, placed opposite each other and fixed at the required angle for maximum efficiency, which must be experimentally determined, in relation the container size. The tangential injection of gas at boundary will spin the liquid (the technique of micronising) within the saucer like container and the gas will exit upward from the central section through appropriate filters to trap the fine mercury droplets / vapour. The RPM will increase to the required level over an adequate period of time, when the container will rise above its resting place indicating a buoyant state, which can be detected and measured. The exhausting of the spent gas system must be free flowing, without causing any significant pressure rise within the container.

This experiment has been conducted in a simple workshop, with a container of 8 inch diameter and an air pressure of about 2500 lbs / sq in. through two hypodermic syringe needles placed at opposite positions. The Mercury layer was confined to about a 1/16th of an inch clearance between top and bottom of the container. However the spin rate could not be measured by any instrument.

It is advisable to discuss hands on with actual persons intending to conduct the experiment as there seems to be no record of such a procedure in the public domain and therefore it will be correct to discuss ways and means at least for the first experiment. After that discussion and with mutual agreement, detailed specifications and drawings etc can be provided.