

Theory of Nothing – Spandakarika

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Abstract— I am going to present a theory of manifestation, which can link all the four forces of universe and can able to explain whole creation and evolution of universe. To understand Theory of Nothing (TON) first I'll explain an old tantric philosophy 'Spandakarika' and also need to explain Sankhya philosophy. To better understand 'Sankhya philosophy' any one can read my paper published in IJSER December 2015 edition with title 'Theory of anything – Sankhya philosophy' or read my book 'Detail geography of space'.

Index Terms— Theory of nothing, Theory of everything, Theory of anything, science and spirituality, quantum physics, quantum physics and tantrism, unify theory, evolution of universe, creation of universe, four fundamental forces of universe, four interactions of universe, gravitational wave, gravitational force.



1 INTRODUCTION

Is it possible of emerging this huge universe from 'nothing'? If yes how and if not then how it was manifested? I am going to present a theory from which we can solve all the mysteries of universe like how four fundamental forces of nature are link? How quantum particles are link with macro world. How gravitational waves are link with electromagnetic field and how both are part of one single spectrum?

To understand Theory of Nothing (TON) first we have to understand old tantric philosophy 'Spandakarika' and old Hindu philosophy 'Sankhya'. To understand Sankhya philosophy and how physics is link with it, one can read my published paper 'Theory of anything – Sankhya philosophy' or read my book 'Detail geography of space'.

2 BRIEF OF SPANDAKARIKA

Detailed 'Nothing' is independent, free knower and free doer. Means he is independent and independence is his main power. That 'Nothing' is consciousness, vibrating power. So all visible world is 'Spanda' or pulse of nothing or consciousness. 'Nothing' has five properties :

- (i) 'Nothing' is keep-generating 'Spanda' or pulse in all direction.
- (ii) All the energy and matter are generating from ever-pulsating 'Nothing'.
- (iii) All form of matter and energy are due to different interference patterns between different pulse of 'Nothing', which were generated by one time or other.
- (iv) Every pulse has basic nature to go back to its source and merge in it. This merge is completion of one cycle in reference of the source.

The energy and matter generated from interference of different patterns of pulse having same basic quality of 'Nothing' means it generate pulses and wait to come back those pulse to source and merge in it.

3 BRIEF OF SANKHYA PHILOSOPHY

The manifested universe has the three modes (guna). It is in discriminating, objective, manifestation, activity, and restraint respectively: they mutually subdue and support each other,

There is evidently a subtle element (Sattwa), one of passion or force (Rajas), and something which is contrary to both an element of dullness or insensibility (Tamas), in all creator of universe; and these are assumed to indicate a primary difference in the constituent elements of Nature. Nature or primordial matter is described by the gunas, which were primarily in equilibrium, and so long as this state existed there was no emanation into separate forms of matter. This state of rest was destroyed when nature began to act, though unconsciously, this movement, as motion or activity in general, is due to the influence of that guna, or constituent of Nature, which is called passion" (Rajas). Three gunas are called (1) Sattwa, truth or goodness, as light (or subtle), and enlightening (or manifesting); (2) Rajas, Properly Passion, but sometimes interpreted as foulness as exciting and mobile; and (3) Tamas, darkness as heavy and enveloping (or obstructive,). (1) Essential (2) Impetus (the force or energy with which a body moves, something that makes a process or activity happen or happen more quickly) (3) Caligo. As Sankhya say, Sattwa is the reason of manifestation or it is the mode which is responsible for existence of everything in universe. We can tell about any object by awareness of their presence in space or we can say that an apple exist because we can observe its existence in space. So the things which we can observe or able to identify by our senses or any instrument, we can say that the thing exists in world otherwise not.

4 CREATION/MANIFESTATION OF UNIVERSE

The very basic question is how we came to existence from 'Nothing'. Is it possible? No, never! The reason is that it violates basic rules like conservation of energy and matter, or in Sankhya terms, modes of nature. So why was there a point of time in the past where things started to appear? And creation started? If we recall the properties of three modes of nature, then it is not much difficult to understand.

Sattwa is responsible for existence, or in more general terms, anything in universe is visible or predictable due to Sattwa, Rajas is responsible for motion or visible energy and Tamas is reason to contain mass by any object. So before the creation or more correctly manifestation, all the matter was present in dormant unmanifested form. We know that one name of Sattwa is manifestation itself. So before the creation, everything

was unmanifested. which means without Sattwa only Tamas was present like dark matter of today. Ok, but how this Tamas is converted into Sattwa so that manifestation starts or things start appearing in space because that time also there was no Rajas or motion. So how things started to appear?

Actually before manifestation, Rajas is also present but in pure form like dark energy of today, which is present in universe every time but not visible to us because of absence of Sattwa.

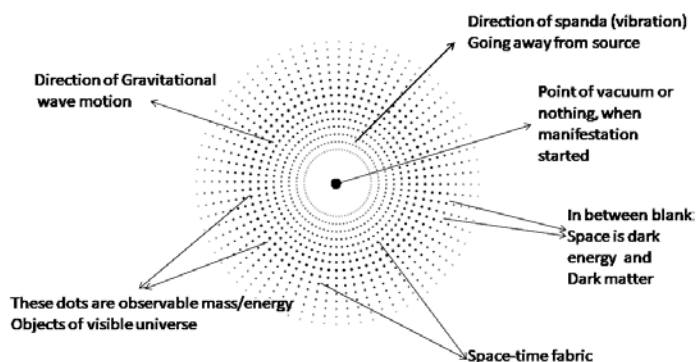
Let's try to understand creation step by step.

Before creation, the whole matter and energy were present in pure form of dark matter and dark energy, but no creation was possible or universe was not visible because of the absence of Sattwa. We are saying that the space or Sattwa has come into existence from Tamas and Rajas, and due to this, Sattwa manifestation appears to us in different forms of matter or evaluation of universe started. (for more details read my book 'Detail geography of space')

5 Theory of 'Nothing'

Just imagine a situation just when our universe is started appear from nothing to something means when Sattwa reached upto a threshold, which require appearing anything. Now imagine a time when first impulse is generated from a point where 'Nothing' was started to appearing in something. according to 'Spandakarika', at very fine time after the generation of first impulse it started to propagate all around and space came to the picture. Also with every changing momentum of impulses create different snapshots of generating space means time also generated.

Now space-time is generated and it started to widen in 3-dimensions. See image below:

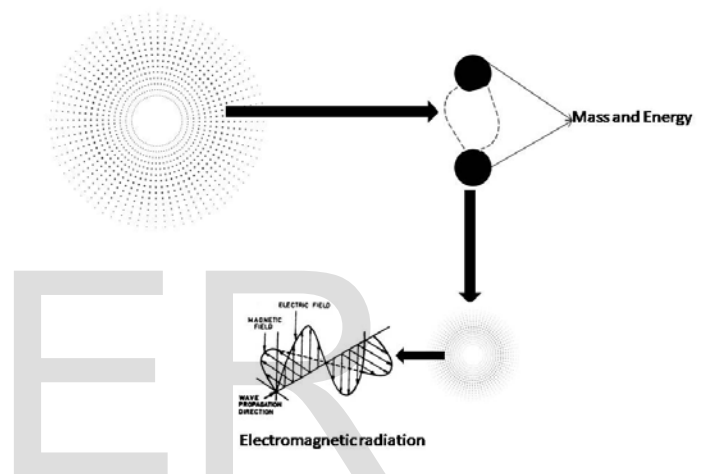


This space-time curve is actually separated all around and called gravitational wave. The direction of motion of gravitational wave is actually direction of evolution of universe. Which creates many other mass bodies denoted by points in image. But how they were created. Remember the (iv) point of 'Spandakarika' brief Every pulse has basic nature to go back to its source and merge in it. So each and every pulse emerge from source or 'Nothing' started to move back to its origin. So the interference of outgoing pulse from source and returning pulse interact with each other and create many mass bodies

like stars, nova, galaxies etc. keep in mind that mass and energy is keep changing from one form to other one step future Sattwa, Rajas and Tamas keep converted to each other and many different entity in our universe keep appear and disappear to us and creates uncountable particles and objects with different properties.

So many different objects do play their game in space time fabric or fabric created by outgoing impulses of gravitational waves having very short frequencies or large wavelength.

Now according to (v) point of 'Spandakarika' brief The energy and matter generated from interference of different



patterns of pulse having same basic quality of nothing means it generate pulse and wait to come back those pulse to source and merge in it.

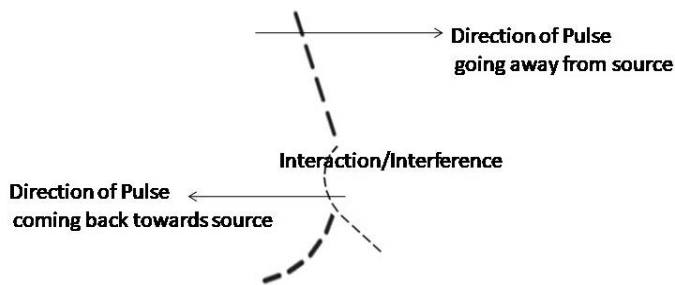
So these different objects creates their own wave patterns of many different frequencies. Some are observable to us like electromagnetic spectrum and other which we currently can't observe.

6 FEW POINTS AND THEIR CLARIFICATION

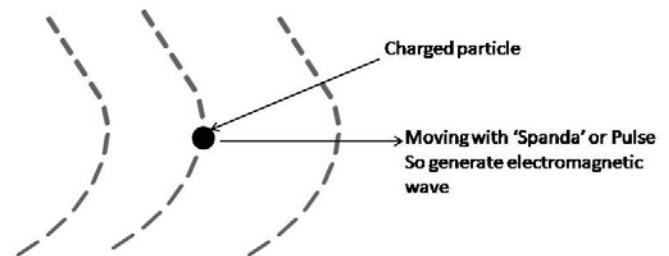
(i) Why expansion of space-time fabric moves in spherical dimension?

Because at starting point of 'Nothing's 'Spanda' or vibration or pulse start to expense in all possible directions, which is by default spherical (which covers all the direction and nothing left).

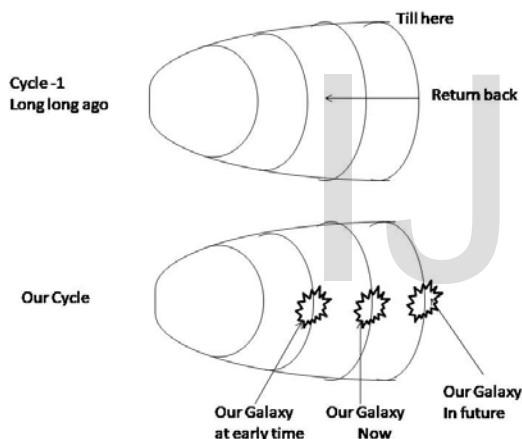
(ii) 'Spanda' or pulse going away from source 'lose its strength (Energy/Mass) by the friction of coming back wave interference.



Charge is simply a property of particle how easily it can convert to and from mass to energy or in Sankhya philosophy terms how easily Rajas can be converted to Tamas and vice versa. After a threshold of frequency EMR starts showing ionizing radiation for higher frequencies.



(iii) In each cycle pulse goes to its maximum possible distance and then comes back to source (possible space-time fabric expansion). We can say it is a cycle of evolution and devolution of universe.



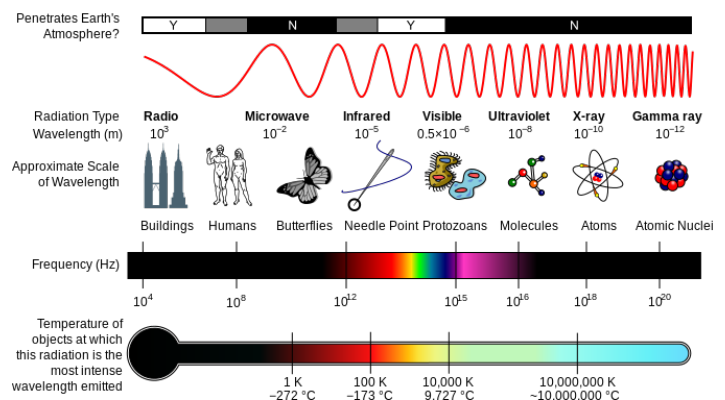
(vi) Distance till wave of pulse vibrations reaches from source is inversely proportional to frequency of vibration.

7 BIG PICTURE BEYOND ELECTROMAGNETIC WAVE

Waves of electromagnetic spectrum vary in size from long radio waves the size of a building to very short gamma rays smaller than atoms nuclei.

(iv) Expansion of space-time curve or fabric depends upon the frequency of gravitational waves. Gravitational waves are themselves first visible pulse of 'Nothing's' 'Spandas' or vibrations. Future manifestations of those pulses are electromagnetic spectrum and other unobservable waves or spectrums.

(v) Electromagnetic waves of different frequencies are called by different names since they have different sources and effects on matter. Means different points of energy and mass over space-time fabric. Electromagnetic waves are emitted by electrically charged particles undergoing acceleration. These waves can subsequently interact with other charged particles exerting force on them.



As waves cross boundaries between different media, their speed changes but their frequencies remain constant. Different speeds of waves having different wavelengths. But why frequency remains constant? Because each 'spanda' or pulse of wave generates from source at fixed duration. So all 'Spanda' or pulse inherits this property of original 'Spanda'.

Where Gravitational wave fit in spectrum?

Compact concentration of Energy (e.g. neutron stars and black holes) or heap of interference of 'Spandas', should wrap space-time and whenever such an energy concentration changes shape, it should create a dynamic changing space-time fabric that propagates out through the universe at the speed of light. This propagates fabric is actually gravitational wave.

Electromagnetic waves are oscillations of the electromagnetic field that propagate through space-time but gravitational waves are oscillations of the 'fabric' of space-time itself.

Electromagnetic waves are almost always incoherent super positions of emission from individual electrons, atoms, or molecules.

Cosmic gravitational waves are produced by coherent bulk motions of huge amounts of mass-energy- either material mass, or energy of vibrating, nonlinear space-time curvature.

Electromagnetic waves are easily absorbed, scattered, and dispersed by matter. Gravitational waves travel nearly unscathed through all forms and amounts of intervening matter.

Astronomical electromagnetic waves have frequencies that begin at $\sim 10^7$ Hz and extend on upward by roughly 20 orders of magnitude.

Astronomical gravitational waves should begin at $\sim 10^4$ Hz and should extend on downward from three by roughly 20 order of magnitude.

The information brought to us by gravitational waves will be very different from (almost "orthogonal to") that carried by electromagnetic waves; gravitational waves will show us details of the bulk motion of dense concentrations of energy, whereas electromagnetic waves show us the thermodynamic state of optically thin concentrations of matter.

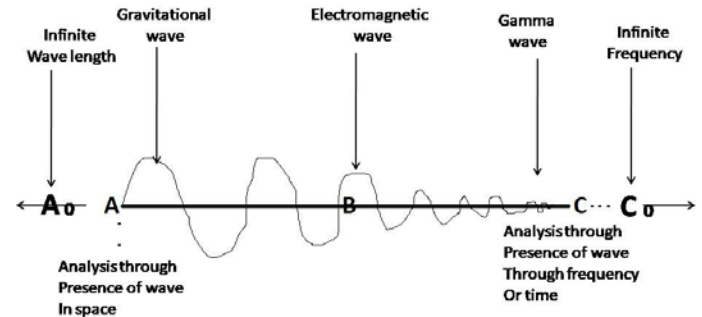
Typical electromagnetic sources are stellar atmospheres, accretion disks, and clouds of interstellar gas. None of which emits significant gravitational waves, while typical gravitational wave sources are cores of supernovae (which are hidden from electromagnetic view by dense layers of surrounding stellar gas) and colliding black holes (which emits no EMW at all)

8 ALL TOGETHER

can we draw a single spectrum, which will cover all waves, radiation, forces, and particles? Let's try, see image below:

At point A spectrum denotes gravitational wave cycle having frequency 10^4 to 10^{18} and at point B it shows electromagnetic spectrum. at point C it denotes gamma rays. So when we are moving from point A to B to C means we are going from long wavelength to short wavelength or short frequency to long frequency. It is also note that from point A to B to C as we are moving, the property of spectrum which is important for calculations is from wave form to particles to very small particles.

Or we can say that at point A motion of wave in space is important and at point C frequency or time is important.



Let's move beyond our fixed range of spectrum means at point A₀ and C₀.

We can say that at point A₀ and its left there might be a wave having wavelength more than gravitational wave or it is a wave which was created due to the first pulse of creation from nothing and it has such a big wavelength that till now it hasn't completed one cycle of wave and when it completes one cycle, it means that would be the time to return and merge of 'Spanda' in its source means in 'Nothing'. So we can say that wave from left of point A₀ has infinite wavelength or zero frequency.

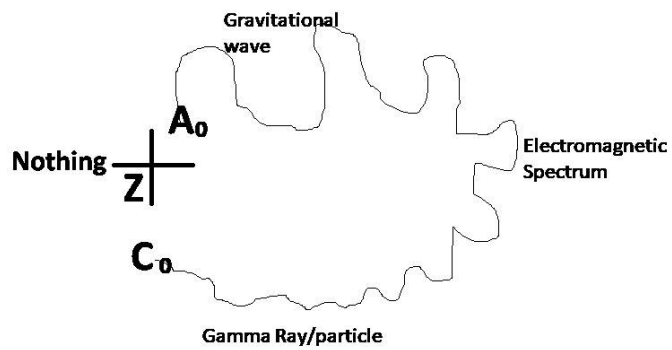
Now see point C₀. At C₀ waves are not identifiable and there are only tiny particles, which are much smaller than which we are aware of. Now when we move right of point C₀ we can say there exist particles which have infinite frequency or zero wavelength means they are doing their cycle of 'Spanda' going away from their source and back to source in such a fast way that we cannot detect them or we can say their cycle of going away from source and merging back to the source is almost taking no time.

Again observe properties of wave at left of point A₀. In ideal conditions wavelength of wave is infinite and its frequency is zero at A₀. Infinite wavelength means wave will never complete a cycle of repetition. Also zero frequency means wave is too long that it cannot complete its single cycle. From these two conditions we can say that at left of point A₀ the wave is a straight horizontal line.

Similarly observed properties of wave at right of point C₀. In ideal conditions we can say that wavelength of wave is zero and its frequency is infinite at point C₀. So what we get at right of C₀ is a vertical line.

What if we extend these points and meet them to make a circular spectrum. Imagine at point Z they meet. So point Z is a point of creation or where things start appearing. At point Z waves and particles are separate entities. Also at point Z space and time means space was represented by a horizontal line and time was represented by a vertical line. This is the point of nothing, this is the point of possibility of zero and one or complete creation or complete desolation. Or this is the point of infinite potential energy and infinite kinetic energy.

When interference of this horizontal and vertical line happened then creation of the universe started appearing and 'Spanda' or pulse spreads all around. 'Nothing' starts to show something.



9 REFERENCE

Wikipedia

Detail geography of space by Ashish Kumar

<http://www.ijser.org/onlineResearchPaperViewer.aspx?Theory-of-Anything-Sankhya-Philosophy.pdf>

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