

Determinism of nothingness

Dominique Mareau
Ingénieur-Chercheur
France
domimareau@hotmail.com

Abstract

Many statements of physicists who question the birth of time. They act as if they knew the answer to the space and the inert mass. Mass, space and time form a continuum inseparable. The basic premise of the OSCAR model is certainly not the firstfruits. Any consideration for eternal settings leads to theology. The principle of demarcation should be applied if any scientific discussion would be meaningless. The inseparability of continuum {mass-space-time} is specific to the oscillator, including for the most rudimentary.

Keywords

The dual oscillator stochastic blur point zero zero duality; determinism nothingness constant speed, dual, reciprocal causality, universality of the electron and boson tachyon.

1. *The founding premise*

The only valid premise for the universe is based on five principles:

- the principle of duality,
- the principle of demarcation
- the principle of action zero,
- the principle of incommensurability,
- the principle of Occam's razor.

2. *The duality principle is robust*

Highlighted by De Broglie, this principle applies to the first dual wave / particle. There are other types of duality [1] in all areas. However, the set {all fields} is the universe itself.

What kind of duality of the universe? The answer is constrained by the principle of demarcation that excludes physical constants eternal. Thus the duality of the universe is of type:

- ◆ quantum universe (with constant)
- ◆ pre-quantum universe (without constant)

We must therefore admit a state of world stochastic dual.

We will show that the most fundamental level, the non-duality (oneness) is always the result of a dual confrontation.

3. *The principle of action zero*

The duality of the pre-quantum state of the universe can not be static because it would be characterized by at least a constant. It is therefore dual and fluctuating and its action is zero.

The only solution to meet all these criteria is the dual stochastic oscillation. The result of this duality is constrained to induce a perfect zero. The oscillator responds perfectly to the inseparability of {mass-space-time} continuum because can not exist without these three basic parameters. But is it a single oscillator or oscillators N? The precise answer is justified by the result, but the principle of incommensurability, rejects uniqueness. This principle allows an immeasurable number of oscillators.

Thus the logical constraints lead us to reconsider the question posed in the introduction, about the ontology of time. It is inseparable from that of the whole {space-time-mass}.

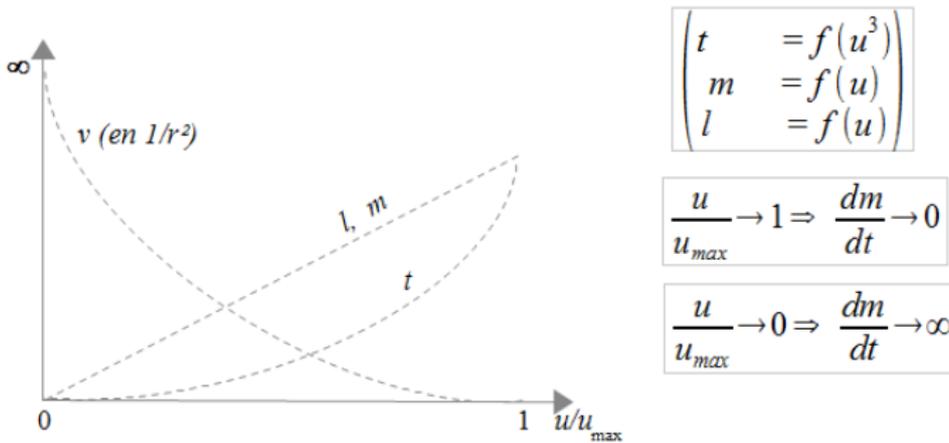
4. The principle of Occam's razor to the oscillator of « nothing »

We must describe and explain the simplest stochastic oscillator duel. This requires appropriate terminology introduced :

- a) two entities that otherwise compete are tachyons (+ / -),
- b) all oscillator is a neutral boson zero setting,
- c) in the repository there is a continuum tachyon {mass-space-time},
- d) in the repository boson, the continuum is zero,
- e) the spatial amplitude in the repository tachyon is 1D,
- f) there is a causal link that allows the algebraic summation of null result,
- g) the mass in the repository tachyon evolves alternately as the amplitude,
- h) the velocity tends to infinity as we approach the zero point,
- i) the zero point is a gray area involves a function which prevents the infinite,
- j) if the time varies with the cube of the amplitude, infinity is avoided.

Should explain why the principle of action can only reject null infinity? However we can say how he does with this simple function :

Ontology of the oscillator of "nothing"



The speed v varies in u/u^3 and therefore, in $1/u^2$

The mass flow such as speed varies in $1/r^2$. When the velocity tends to infinity at zero, it is countered by mass flow. When the amplitude tends to the maximum mass flow rate approaches zero. The approach zero generates an infinite number of totally random initial parameters. This is the guarantee of the absence of pre-established constant. The principle of action is equivalent to a zero determinism "nothing." (see below the Dirac function). The intensity of the mutual causal is proportional to the mass and the amplitude. This is true in the quantum state of the universe as the cgs system is consistent by fixing the electric charge by:

$$e^2 = k m_e r_0 \tag{1}$$

with $k = 1$ taking into account the permeability and the mass and the classical radius of an electron. It should be noted that the electron-positron pair is from the tachyon.

5. The Dirac function and the duality of zero

The Dirac function is related to the theory of Schwartz distributions. It uses the concepts of linear algebra and topology, centered on the idea of duality. The Dirac distribution is a pseudo function which is zero everywhere on its domain of definition, *except that zero* and the integral would be 1. It is strictly limited in the sense of distribution of a sequence of functions and one integral converging uniformly to zero on compact containing no zero. The Dirac function from the Fourier transform

$$X(\omega) = \int_{-\infty}^{+\infty} x(t) e^{(-i\omega t)dt} \tag{2}$$

admitting zeros regularly spaced $1/t$. More t , the greater tends to transform a narrow peak :

$$\lim_{\omega \rightarrow 0} X(\omega) = t \tag{3}$$

If t , the period tends to infinity, the calculation of the integral limit is in the form:

$$\lim_{\omega \rightarrow 0} X(\omega) = \lim_{t \rightarrow 0} \frac{\sin(\omega t/2)}{\omega/2} \tag{4}$$

This limit is nonzero only if $\omega \rightarrow 0$. The Dirac function applied in the context of the stochastic oscillator, means that the static zero does not exist. This function is zero almost everywhere but its integral is not zero:

$$\int_{-\infty}^{+\infty} \delta(t) dt = 1 \tag{5}$$

The Dirac function acts on functions by extracting a random value which prohibits the static zero. It is a consequence of the principle of action in the context of zero oscillator dual that can not produce infinite physical values.

It is imperative to distinguish between two types of zero:

- the algebraic sum strictly zero at all points of the spatial amplitude,
- the vagueness and probabilistic approach zero.

Attention is also the second dual and strictly symmetrical. The sum of the fluctuation is always zero. It is a sham to say that the Heisenberg uncertainty principle may be valid in the pre-quantum world. This is a magical way and generate a false default energy.

The notion of duality is robust because it is also expressed in this context. Determinism of nothingness, guided by the principle of action anywhere, has no choice but to restart a cycle of oscillation completely random. Approach zero, rather than generate infinite physical values, nourishes infinite potential probability of initial settings. Blur zero generates instability. In any other part of the amplitude, the inert mass gives the stability of the evolution. But to the zero point, the absence of inertia opens the probabilities in the infinite potential of frequencies. Inert mass emerging randomly select one of them as initial value. The lexical aspect is important because if the "zero point" is unclear, it may not be a point. By nature it is immeasurable and variable.

6. *Link with the quantum universe measurable*

The point of view of static nothingness is rejected for two strong reasons :

- by definition, it can not evolve in a dynamic-quantum universe
- should admit a deity who chooses eternal constants

The expression of nothingness is in the form of dual oscillators and stochastic 1D. However the scientific approach should not only think about the possible but also look for evidence. I must say precisely how one moves from one state stochastic (pre-quantum) a quantum state. Simply apply the well-known laws concerning boson oscillators [2, 3, 4, 5, 6, 7, 8, 9, 10] and those for Bose Einstein condensate (BEC).

The summary of the process is as follows:

- a large sample of bosons oscillating confusing its zero point (non-zero probability)
- So there is a synchronization that makes the spectrum becomes single
- synchronization back to cooling (credit enthalpy for the quantum state to come)
- therefore the constants appearing in conjunction with a first BEC.
- random values that are statistically BEC is unstable.
- BEC-0 divides (mitosis) N BEC-son stable
- simultaneously, separation occurs causal generalized tachyon
- they become the primary positron-electron pairs

We show that the function of the stochastic oscillator is the key to that tachyons can form a network subquantum space $\{x, y, z, t\}$.

7. *Conclusion*

The issue is not limited to knowing wheres it comes, but is extends to the ontology of:

- continuum : space-mass-time.
- the appearance of constants (from nothing)
- credit entropy provided to the quantum state
- the appearance of space-time (x, y, z, t)
- the appearance of the gravitation (its field of fossil causal duality oscillating)
- the appearance of the dark matter (DM)
- the appearance universe structure
- the cause of the expansion
- the cause accelerating expansion
- the cause the formation of neutrons and protons
- the distribution matter-antimatter

We show that all basic answers direct result of stochastic oscillators. And the standard of proof is very demanding because it requires that all the answers are derived from the premises and all observations (at all levels) are consistent with this. Nothingness is deterministic because it can only maintain itself. He admits the dual principle of rejecting the null action static status. There is no uniqueness outside the duality principle with reciprocal causation. Boson is always the sum of two fermions. Formulation lacks a lexical naming the entire universe composed of both {pre-quantum + quantum} states. We say that the whole universe is boson zero energy.

8. References

- 1/ <http://sergecar.perso.neuf.fr/cours/logique4.htm>
- 2/ gsjournal.net/old/physics/mj; "*electron, a fermion very different from others*"; D Mareau; 4481 ; 2013 january 17.
- 3/ gsjournal.net/old/physics/mj; "*The duality of the univers-oscillator*"; D Mareau; 4533 ; 2013 february 14.
- 4/ gsjournal.net/old/physics/mj; "*La longueur de Planck, intervalle élémentaire qui mène au proton*" ; 4594 ; D Mareau; 2013, march 01.
- 5/ gsjournal.net/old/physics/mj; "*La vraie-fausse problématique du temps*" ; 4622 ; D Mareau; 2013 march, 05.
- 6/ gsjournal.net/old/physics/mj; "*Le paradoxe de la longueur de Planck*" ; 4645 ; D Mareau; 2013 march, 07.
- 7/ gsjournal.net/old/physics/mj; "*La masse de Planck offre deux solutions*" ; 4688 ; D Mareau; 2013 march, 11.
- 8/ gsjournal.net/old/physics/mj; "*Proved continuity scales of the universe*" ; 4694 ; D Mareau; 2013 march, 12.
- 9/ D. Mareau (2012) "*L'univers miroir, né du rien pré-quantique*"; ISBN 978-1-4717-0906-7
- 10/ site web « *modèle OSCAR* » ; <http://www.cosmologie-oscar.com/>