

Neoclassical physics - presentation

dr. Marius Lelong

March 10, 2023

Abstract

Since 1905, physics has lost its soul, the intimate contact with reality and reason. The modern era has brought a revolution, a profound change in the representations we have of the world. But the old classical Newtonian physics is resisting, it has not yet said its last word. Throughout this article, we will show that it provides an elegant, clear and precise answer to current questions in physics. Despite appearances, it remains consistent with all the empirical, experimental data that it can explain while maintaining a requirement for realism and rationality.

1 A century of collective delirium

Neoclassical (Marianic) physics represents an extension of Newtonian physics by a new classification of matter into two classes: macroscopic matter (barionic, structured) and inframatter. This division is made in relation to the ability to determine gravitational interactions at a distance. It is the force of gravity that divides and reigns.

We take up the main relations such as the Grossmann-Einstein gravitational field equations, that of Schrodinger and, through this, most of the current theoretical and experimental results but with an interpretation and use completely different. It is realistic, deterministic, local and above all rational.

The laws of the phenomena that we observe are a composition of laws at the level of inframatter (Lorentz transformation, interference of quantum waves, etc.) and laws at the level of macromatter (Galileo transformation, Newtonian kinematics, etc.). The first often appear as disturbances for the second, while in reality they represent rather an effector sublayer. If in mathematics, a relation returns by transformation to a tautology of the kind $a = a$ and we compare what is comparable, in physics we have invented the physical constants by which we connect improbable things $a = k*b$. Overconfidence in equations without worrying about their correct interpretation is the source of implausible errors. Currently, physics is undermined by fundamental contradictions (dark energy, dark matter, incompatibility between relativity and quantum mechanics, multiple Hubble expansion constant) that can no longer be hidden. Modern physics uses extraordinary concepts (curvature of space and time, modified speed addition, wave-particle duality, quantum entanglement, superposition, non-locality, spatial multidimensionality, etc.) but totally in contradiction with common sense and with the established, classic principles of science. If we look at them through a prism of classical (Newtonian) reasoning, these ideas appear to us as irrational,

absurd, even stupid, a century of collective delirium. This new paradigm has transformed the minds of new generations of physicists, who have been taught “to think against their brains”, by enclosing them in a cognitive bubble. This is the main reason why a conceptual clarification of theoretical physics can be initiated only from the outside, by a ”neophyte”. Even if I do not have in-depth studies in physics and I have some gaps in the field, I can bring a fresh, original and clear vision. After understanding the intimate logic of Newton’s reasoning, I allowed myself to continue his work and complete it. You can look far, sitting on his shoulders.

2 The categorical structuring of reality

Physical reality can be modeled by a category 3 algebra.

The algebra of physics contains two objective categories (discrete and “continuous”) and one relational (Lelong relationship).

These categories are: Matter, Space and Time.

2.1 Matter

Matter is classified in neoclassical physics into two classes: macroscopic matter (baryonic, structured) and inframatter. Most inframatter is found in the form of particle fields: the Mfield (Mariusfield or Materialfield).

Field in modern physics	Mfield in neoclassical physics
Intangible, immaterial	material
continuous Corpuscular (discrete)	corpuscular (discrete)

The Temporal (or Quantum) Mfield interacts with macromatter by modulating physical phenomena (for example, atomic disintegrations).

2.2 Space

Newton describes two major properties in the Scolia of definitions: absolute space is similar or homogeneous and immobile. It is inert in relation to matter, a stage, receptacle of all matter and which pre-exists it. More precisely, this space is a three-dimensional space verifying the properties of the geometry created by Euclid. While Galileo had asserted that ”the book of nature was written in the language of mathematics”, Newton therefore even went so far as to describe space as a mathematical object. His mechanics were even to be so complete and effective in describing observable phenomena that Newton’s assertion was understood to be an absolute truth about the nature of space.

2.3 Time

The word time is the most used word in a language. And yet, no one knows how to define it. What a paradox, isn’t it? In other words, the most common of words has no rational

understanding. How is it possible ? This is because it is an elementary notion, fundamental to the understanding of reality and its definition requires an almost infinite intelligence.

Universal time is the ordered relationship between matter and space. (Lelong relationship)

Imagine a system of static particles! For that, there is no need for time or even space to describe them. It's just about noticing that there is something rather than nothing at all. Now let's imagine that, all of a sudden, something has instilled in them the will to move (or we put energy into the system). To describe the relationship between particles and space, we need an additional parameter and this parameter is time. To describe the intensity of phenomena in a portion of the universe (a system), it must be compared to a universal, global parameter. Newton found such a parameter, which is a function derived from time. It is the flow of time, or the time scale, or even Newtonian time. Considering the law of conservation of angular momentum, we obtain that the cumulative distance traveled by the particles is a linear, one-to-one relationship over large domains with free motion (at its spatial scale).

A past second of Newtonian time tells you that matter has cumulatively traveled "one meter" on a universal scale. (Lelong-Newton relationship)

3 Light

Newton had developed a purely corpuscular theory of light. But, for more than two centuries, since the experiments of Young (1801), no one doubts the wave nature of light. Nobody... except a refractory Gaul. The photon generates in its passage a wave in the ether (like the boat on the water) which passes through the two slits and which diffracts. The final trajectory of the photon is influenced by this wave (like that of a surfer on the waves). The photon, of course, passes through a single slit. Moreover, in all the experiments of interferometric optics, the physicists study, without knowing it, the properties of the luminiferous ether and not those of the light (of the photon).

Light has an exclusive corpuscular nature. (Newton-Lelong relationship)

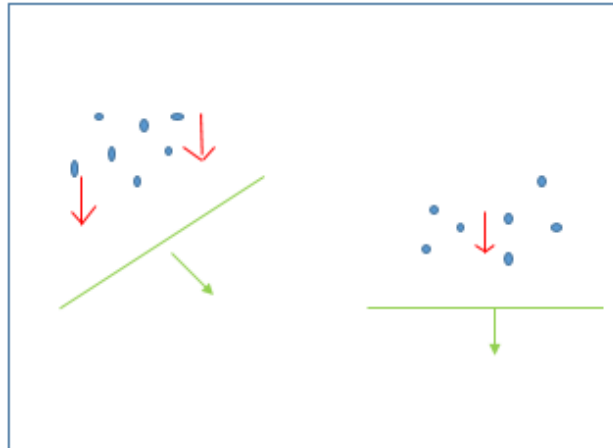
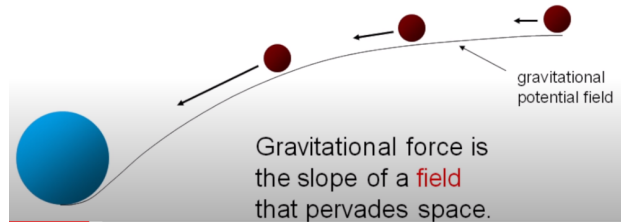
Unfortunately for Einstein, the luminiferous ether does exist (the Melectromagnetic field). Through the interaction with the temporal Mfield, the electromagnetic wave (generated when the photon passes) changes shape and becomes asymmetrical. It is subject to the "relativistic" addition of velocities (to the Lorentz transformations). The photon is subjected to the classical addition of velocities (Galileo transformations). As a general rule, the wave aspects of "light" (an meta phenomenon) are subject to relativity and the particle aspects of light are subject to Newtonian physics. The amalgam between the two phenomena leads to the aberrant interpretation of the empirical data.

The photon is subjected to the classical addition of velocities. (Lelong - Newton relationship)

The electromagnetic wave is subject to the "relativistic" addition of speeds (to Lorentz transformations). (Lelong relationship)

4 Gravity

There is no other more mysterious force in the world than gravity. It connects us to the Universe, to the stars. And there has been no better studied subject in physics than this celestial force. And yet it continually eludes us. Unsurprisingly, the first law of gravity was given to us by our master of all, Sir Isaac Newton. The idea of a mechanism of action by a curvature of a potential field came out the first time by Pierre-Simon Laplace, Comte Laplace, then 1st Marquis de Laplace.



What GR calls space-time is a material structure that has nothing in common with either space or Newtonian time. This is the quantum (or temporal) Mfield (blue in the fig.) and the effector gravitational (or spatial) Mfield (green in the fig.). The coupling between the two is done in a hybrid way, directionally and intentionally.

$$\rho_{kinetic} = \rho_{0kinetic} \sqrt{1 - \frac{r_s}{r}}; \quad (1)$$

$$r_s = \frac{2GM}{c^2}; \vec{G} = gradG; \vec{Q} = gradQ; V(r) = V(G) + V(Q);$$

$$\frac{\vec{G}}{|\vec{G}|} = \frac{\vec{Q}}{|\vec{Q}|}; \text{(Lelong connection relationship)} \quad (2)$$

Initially, the following formula was considered to approximate the resulting potential:

$$V(r) = -GMm\frac{1}{r}(a_0+a_1\frac{G(M+\alpha m)}{r}+a_2\frac{G(M+\alpha m)}{r^2})\text{with the constants determined empirically;} \quad (3)$$

In appendix 1, we show how we can justify and calculate the precessional movement of the perihelion of Mercury and the deviation of the light ray in the gravitational field.

I have reason to think that $a_0 = 1$; $a_1 = 0$; $a_2 = \frac{J^2}{G(M+\beta m)c^2}$; $j = r\dot{r}$; $\alpha, \beta = 0$ or 1 .

Then the final (canonical) formula for the first law of quantum gravity is:

$$F_{1gq} = \frac{dV(r)}{dr}; V(r) = -\frac{GMm}{r}(1 + a_2G(M+m)\frac{1}{r^2})(\mathbf{Lelong-Newton\ relationship}); \quad (4)$$

$$V(r) = -\frac{GMm}{r}(1 + \frac{J^2}{c^2} \cdot \frac{1}{r^2})$$

$$F_{1gq} = \frac{GMm}{r^2}(1 + \frac{3J^2}{c^2} \frac{1}{r^2})(\mathbf{Lelong\ relationship}); \quad (5)$$

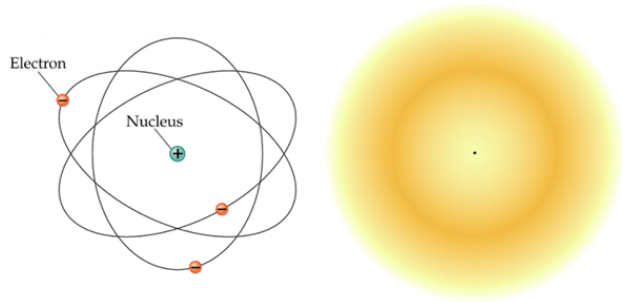
This equation is equivalent to that in tensor form of Grossmann-Einstein. Quantum phenomena represent disturbances to the Newtonian gravitational force. General relativity is actually a hidden quantum theory of gravity.

5 Quantum mechanics

A spatio-temporal and emotionally close example. This year, France won a Nobel Prize for Physics following a quantum entanglement experiment in the 1980s. We are told that the "quantum" nature of reality has been demonstrated with non-locality and possible "remote actions". It's a lie. If we make the assumption that the two entangled particles change spin, phase, regularly in time, we obtain the same experimental results, Bell's inequalities are violated, without the need for any "remote action", in the framework of classical physics. This experience proves nothing.

The nature of physical reality is neoclassical!

In Schrodinger's equation, the resulting wave is not a cloud of probability, as the modern paradigm asserts, but it is indeed real. It is a wave at the level of the quantum Mfield (temporal) which modifies the pressure of the spatial Mfield (gravitational effector) in accordance with the relation of "connection" and by this it modifies the trajectories of the particles. It is a "butterfly" phenomenon: when by small disturbances, we achieve great effects. In the atom, an electron is held hostage in a "spatial" tunnel, on imposed but well-determined trajectories.



6 The unification: gravitation and quantum mechanics

It is the "connection" relationship that makes the relation between the quantum field (temporal) and the spatial Mfield (gravitational effector).

$$\frac{\vec{G}}{|\vec{G}|} = \frac{\vec{Q}}{|\vec{Q}|}; \text{ (Lelong connection relationship)} \quad (6)$$

7 Black holes

Black holes Black holes are vortices of the spatial quantum field. The resolution of singularities (a subject of controversy for decades) is relatively simple if we understand that the density of an Mfield is a finite value and even that we can have almost "infinite" curvatures of the spatial Mfield.

8 Dark matter

There is no additional source of gravity in a galaxy and dark matter is an illusion. There are two types of effector Mfield for gravitation and therefore two gravitational forces. Newtonian gravitation and Marian gravitation! The final (canonical) formula for the second law of quantum gravity is:

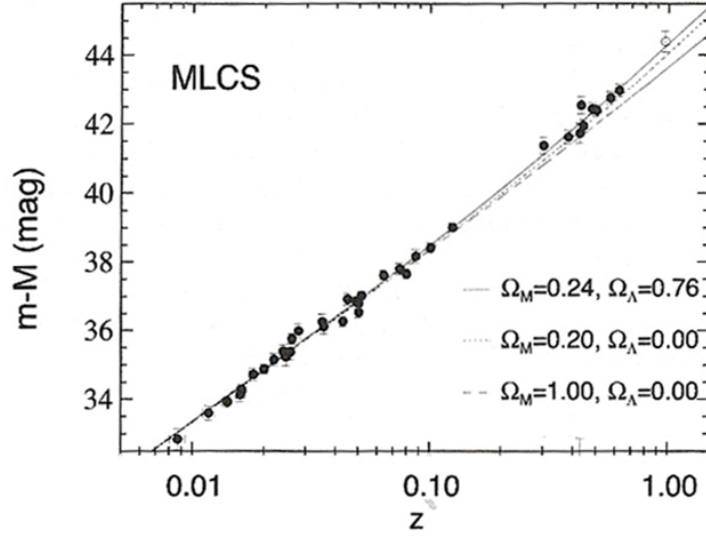
$$F_{2gq} = \frac{dV(r)}{dr}; V(r) = -GMm \cdot \ln r \cdot \left(1 + a_2 G(M + m) \frac{1}{r^2}\right) \text{ (Lelong relationship); } (7)$$

The second type of effector gravitational Mfield is more sensitive than the first to the intermediate Mfield. Galaxies form by following the distribution of this type of inframatter, the Mtype II gravitational field. He is the ruler of the galaxies. Ordinary matter just follows.

9 Dark Energy

Dark energy is the biggest mistake in human history. At what point? Big as three quarters of the universe.

Looking at distant Type Ia supernovae, astrophysicists have concluded that the universe is expanding, that there is expansion in a way accelerated by an unknown energy that arises



out of nothingness. This is again an aberrant interpretation of the experimental data by underestimating the relative speed of light that comes to us from distant stars. We take into calculation a constant speed, while it becomes more important for distant galaxies. And the super-estimate of the speed of their removal (of the galaxies). The error on the nature of light and the non-discrimination between the wave and particle aspects, with the amalgam between the two phenomena, lead to the aberrant interpretation (of the empirical data) of the accelerated expansion of the universe (the dark energy), of the two different values for the Hubble constant and generally for different physics at the level of the distant universe.

It suffices to "normalize" the data to obtain an expansion of the universe according to Hubble's law.

$$\text{replacing } \frac{\lambda - \lambda_0}{\lambda_0} = \frac{v_r}{c} \text{ by } \frac{\lambda - \lambda_0}{\lambda_0} = \frac{v_r}{c + v_r} \quad (8)$$

And all of this, because of a bad addition ... in 1905. The cycle is complete.

10 Conclusion – paradigm shift towards neoclassicism

All three theories (special relativity, general relativity, quantum mechanics) that are the basis of modern physics are fundamentally wrong. This article does not envisage a revolution in physics similar to that of the beginning of the 20th century, it would rather be an (ontological) restoration which is necessary and desirable. We must return to the sources, to the age-old principles, to the wisdom of our ancestors, to the respect of our Traditions!

References

- [1] **Isaac Newton**, Philosophiae naturalis principia mathematica.
- [2] <https://www.laphysiqueneoclassique.fr> contact@laphysiqueneoclassique.fr

Demonstration of the motion of precession of the perihelion of Mercury in neoclassical physics and the calculation of the deviation of the light ray in a gravitational field. The results matches GR and all empirical data.

11 Demonstration of the motion of precession of the perihelion of Mercury in neoclassical physics

11.1 We show the conservation of angular momentum in the potential fields:

$$\mathcal{V}(r) = -\frac{GMm}{r} \left(1 + a_2 G(M+m) \frac{1}{r^2}\right) \text{(Lelong-Newton relationship)}$$

$$\mathcal{V}(r) = -\frac{GMm}{r} \left(1 + \frac{J_0}{c^2 r^2}\right) \text{(Lelong relationship)}$$

$$\vec{J} = \vec{r} \times \vec{v} \rightarrow \dot{\vec{J}} = \dot{\vec{r}} \times \vec{v} + \vec{r} \times \dot{\vec{v}}$$

$$\dot{\vec{J}} = \dot{\vec{r}} \times \vec{v} + \vec{r} \times \left[-\frac{GM}{r^3} \left(1 + 3a_2 G(M+m) \frac{1}{r^2}\right) \vec{r} \right]$$

$$\dot{\vec{J}} = \dot{\vec{r}} \times \dot{\vec{r}} + \left[-\frac{GM}{r^3} \left(1 + 3a_2 G(M+m) \frac{1}{r^2}\right) \right] \vec{r} \times \vec{r}$$

$$\dot{\vec{J}} = \vec{0} + \vec{0} = \vec{0} \rightarrow \vec{J} \text{ constant}$$

The same thing for second case .

We note $L = mJ = mr^2\dot{\phi}$ then $J = r^2\dot{\phi}$

11.2 For the considerations of energie conservation:

$$\mathcal{E}_{totale} = E_{kinetique} + E_{angularmomentum} + V(r) = const.$$

$$\frac{m\dot{r}^2}{2} - \frac{GMm}{r} + \frac{m^2 J^2}{2mr^2} - \frac{GMma_2 G(M+m)}{r^3} = const. \quad \cdot \frac{2}{m}$$

$$\dot{r}^2 - 2GM\frac{1}{r} + J^2\frac{1}{r^2} - 2GMa_2 G(M+m)\frac{1}{r^3} = const.$$

We have $a_2 = \frac{J^2}{c^2 G(M+m)}$; $r_s = \frac{2GM}{c^2}$; $r' = \frac{dr}{d\phi} = \frac{dr}{dt} \cdot \frac{dt}{d\phi} = \frac{\dot{r}}{\dot{\phi}} = \frac{\dot{r}r^2}{J^2}$ (*) that $\dot{\phi} = \frac{J}{r^2}$

$$\dot{r}^2 - c^2 r_s \frac{1}{r} + J^2 \frac{1}{r^2} - r_s J^2 \frac{1}{r^3} = const. \quad (9)$$

$$J^2 (r')^2 \cdot \frac{1}{r^4} - c^2 r_s \frac{1}{r} + J^2 \frac{1}{r^2} - r_s J^2 \frac{1}{r^3} = const. \quad \text{that } (\dot{r})^2 = \frac{(Jr')^2}{(r^2)^2} (*) \quad \cdot \frac{1}{J^2}$$

$$(r')^2 \cdot \frac{1}{r^4} - \frac{c^2 r_s}{J^2} \cdot \frac{1}{r} + \frac{1}{r^2} - r_s \frac{1}{r^3} = const. \quad (10)$$

We note $U = \frac{1}{r}$ then $U' = \left(-\frac{1}{r^2}\right) \cdot r'$ and $(U')^2 = \frac{(r')^2}{r^4}$

$$\left((U')^2 - 2 \cdot \frac{c^2 r_s}{2J^2} \cdot U + U^2 \right) - r_s \cdot U^3 = const. \quad (11)$$

The equation (3) it is one of the harmonic oscillator with of fset and a perturbation.

The perturbation will increase with $\phi(t)$.

$$\text{We have : } r = \frac{2J^2}{c^2 r_s (1 + e \cdot \cos \phi)} ; U_\phi = \frac{c^2 r_s}{2J^2} \cdot (1 + e \cdot \cos \phi)$$

We will differentiate the equation (3) $\frac{d(3)}{d\phi}$

$$\text{Then : } U'' = -(U - \frac{c^2 r_s}{2J^2}) + \frac{3}{2} r_s U^2 \quad (12)$$

We put $U = U_\phi + \delta U$ (little perturbation) (with the resolution in δU)

$$\text{We will differentiate the equation (4) } \delta(4) : \delta U'' = -\delta U + \frac{3}{2} r_s U_\phi^2$$

$$\text{So, : } \delta U'' = -\delta U + \frac{3}{8} \cdot r_s \cdot \frac{c^4 \cdot r_s^2}{J^4} \cdot (1 + e \cdot \cos \phi)^2$$

$$\text{Then, : } \delta U'' = -\delta U + \frac{3}{8} \cdot r_s \cdot \frac{c^4 \cdot r_s^2}{J^4} \cdot (1 + 2 \cdot e \cdot \cos \phi + e^2 \cdot \cos^2 \phi)$$

The terme $2 \cdot e \cdot \cos \phi$ it is important because it produce resonance.

$$\text{So, : } \delta U'' = -\delta U + \frac{3}{4} \cdot \frac{c^4 \cdot r_s^3}{J^4} \cdot e \cdot \cos \phi \quad (13)$$

$$\text{With } \delta U = \frac{3}{8} \cdot \frac{c^4 \cdot r_s^3}{J^4} \cdot e \cdot \phi \cdot \sin \phi \text{ solution of (5) .}$$

$$\text{So, : } U = \frac{c^2 r_s}{2J^2} \cdot (1 + e \cdot \cos \phi) + \frac{3}{4} \cdot \frac{c^4 \cdot r_s^3}{J^4} \cdot e \cdot \phi \cdot \sin \phi \quad (14)$$

$$\text{then we have : } \cos((1 - \epsilon)\phi) = \cos \phi + \epsilon \cdot \phi \cdot \sin \phi$$

$$\text{With approximation : } U = \frac{c^2 r_s}{2J^2} \cdot (1 + e \cdot \cos((1 - \epsilon)\phi)) \text{ wheare } \epsilon = \frac{3}{4} \cdot \frac{r_s^2 c^2}{J^2}$$

The angular frequency is modified with the procession of the perihelion $\Delta\phi / \text{orbit} = 2 \cdot \pi \cdot \epsilon$

Apparently Newton has already estimate a procession for the orbital perturbation by an additionally force with the potential inverse in r square. He was so close!

12 We calculate the deviation of the light ray in a gravitational field

In his article "On the Deviation of a Light Ray from its Motion along a straight line through the attraction of a Celestial Body which it passes close by, Berlin, mach 1801, Berliner Astronomisches Jahrbuch, 1801-1804, p. 161-172. , von Soldner finds an angle of deviation:

$$\delta_{\phi\text{newtonien}} = \frac{2 \cdot G \cdot M}{R \cdot c^2} \quad (15)$$

You may find an demonstration here (page 23):

[Something Linky](https://clong.pagesperso-orange.fr/semana/documents/divers/vitesseetc.pdf) <https://clong.pagesperso-orange.fr/semana/documents/divers/vitesseetc.pdf>

With the Lelong-Newton relationship for quantum gravity, we find, for particles with zero gravitational mass, a potential:

$$V(r) = -\frac{G \cdot M \cdot m_i}{r} \cdot \left(1 + \frac{J^2}{c^2} \cdot \frac{1}{r^2}\right)$$

$$V(r) = -\frac{G \cdot M \cdot m_i}{r} \cdot \left(1 + \frac{r^2 \cdot v^2}{c^2} \cdot \frac{1}{r^2}\right) \quad \text{with } v = c ;$$

$$V(r) = -\frac{2 \cdot G \cdot M \cdot m_i}{r} \quad (16)$$

$$\text{And an acceleration : } \ddot{r} = \frac{2 \cdot G \cdot M}{r^2} \quad (17)$$

And if we follow the calculation of von Soldner and Cavendish we have an final angle of :

$$\delta_{\phi\text{neoclassical}} = \frac{4 \cdot G \cdot M}{R \cdot c^2} \quad (18)$$

This matches GR and empirical data and is twice the value calculated in Newtonian physics. This result was considered a pure coincidence until now.