# Prime Theory - a new theory of everything

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## About this theory

Here is the summary of my work on the new theory of everything, *Prime Theory*. It all started back in 2012 or 2013 with a simple hypothesis that crossed my mind regarding the granularity of space and its presumed mechanics; over time, a kind of theory has taken shape, and all those ideas eventually led me to a whole new model of reality, a model that could simply explain everything. It is all about fundamental mechanisms, about the way matter changes at any scale; moreover, all these new laws are based on a paradigm-shifting idea that allowed me to dig deeper into the nature of things, reaching their real physical meanings. These theoretical findings led to new interpretations for mass, electric charge, gravity, and fields in general, which allowed me to give new explanations for some well-known formulas, principles, or laws of physics and to correct some other ones. My books and articles related to Prime Theory may be freely downloaded from this website: <a href="https://www.1theory.com">https://www.1theory.com</a>, and here are the direct links to all books in PDF format:

- Prime Theory, book, 2014, 2015, Premius
   https://www.1theory.com/PrimeTheory.pdf
- 2. **The Universe**, book, 2015, 2016, Premius <a href="https://www.1theory.com/TheUniverse.pdf">https://www.1theory.com/TheUniverse.pdf</a>
- 3. *Life*, book, 2017, <a href="https://www.1theory.com/Life.pdf">https://www.1theory.com/Life.pdf</a>
- 4. *Gravity*, Ten articles, 2018, <a href="https://www.1theory.com/Gravity.pdf">https://www.1theory.com/Gravity.pdf</a>
- 5. Space and Time, book, 2022, Premius, <a href="https://www.1theory.com/Space\_Time.pdf">https://www.1theory.com/Space\_Time.pdf</a>

## **Assumptions**

As I previously said, the basic mechanism of our universe, the one that controls everything and establishes all the other laws for matter and fields, has to be extremely simple and has to work with very simple things. In this context, I saw space as a given of this universe, as a kind of Newtonian framework where the actual building blocks of everything—the spatial granules—are freely moving. These granules are in fact extremely tiny spheres (identical and of perfect elasticity) that move at a constant absolute speed, much higher than the speed of light. They are filling completely the empty space, and any material structure is an organized group of such simple particles. Consequently, my current theory is entirely based on this dual nature of space—an empty frame that is filled by a discrete form of matter.

#### **Conclusions**

These are a few conclusions drawn from this theory, along with some new interpretations:

- Any volume of space is crossed by the granular fluxes, and this thing transformed *space into a granular fluid* with some fundamental, special characteristics.
- The most important property of this fluid is determined by the linear propagation of fluxes, and the ensemble of fluxes crossing a certain point in space represents the intrinsic *gravitational field*. Consequently, the gravitational field is the fundamental, primordial field of the universe, the actual generator of all the components of normal matter—the elementary particles; it also provides their *stability* over time, being at the same time the cause and support for the propagation of all the other known fields.
- *Gravity*, as being the pull generated by the organized matter on material objects, is in fact a perturbation (attenuation) in the uniform distribution of the gravitational field, a change that is produced by the presence of massive bodies.
- Elementary particles are in fact granular formations of discoidal shape (most of them); their stability, symmetry, and intrinsic precession movement are all consequences of the special properties of space (of its internal granular movement). They have certain dimensions and certain mass, and their type of curvature (the disc convexity) dictates their electric charge (as both amount and sign). They are no more point-like, unidentified things with mysterious charge, spin, and so on; they are concrete complex structures of dense granular matter!
- The *anti-particles* of each type of particle above are also granular formations, but of different convexity; they were born in the same way in the first moments of the universe, and their shape was chosen randomly. Quarks, as heavier particles, formed a little bit later the composite particles, while most of the lighter ones (of opposite charges) annihilated themselves.
- Fields (all but the gravitational one) are distinct granular structures, granular fluxes that travel through space at the speed of light. They are generated by the elementary particles in "contact" with the surrounding granular fluid, being temporary granular formations with specific shape, density, divergence and dynamics; the convexity and the global/intrinsic movement of their emitting structures are determining all their particular features.
- The *electric charge* is, as mentioned before, a physical feature of the elementary particles that is due to their type of *curvature*, convex or concave; as far as I know, this kind of interpretation *is the first one ever* in the history of quantum physics!
- Mass, known as a measure of inertia or as an amount of staff, is seen a little bit differently now (it still has the additivity feature, being regarded here at the quantum level). As everything is governed by the laws of space, mass makes no exception; it is in fact a measure of the total granular impulse needed to be transferred to a particle within a certain time interval in order to get certain acceleration and speed values. Mass' physical interpretation is connected to a global change in direction of the impulse possessed by each

granule in a particle. At lower speeds, the impulse required to accelerate one particle to a certain speed is proportional to that speed, so mass remains constant when our particle accelerates in a uniform spatial medium. However, there is a phenomenon that manifests at higher speeds, tied to the orientation of the granules inside the particle and to the relativistic reflection that occurs in front of the particle (when moving at relativistic speeds), which leads to a global *non-linear dependency of mass on the absolute speed*. Mass is the "resistance" faced by particles when their speed is changed, so it will also depend on the number of granules involved and on the structure's (absolute) rest mass. As any particle is always moving, this rest mass is in fact a dynamic quantity, where the intrinsic, relativistic precession is involved for sure. Consequently, there will be small differences (at the macroscopic level) between the inertial mass and the gravitational one, especially in the supermassive stellar body cases.

- The *Relativity and its principles* are also consequences of the movement of matter in the uniform medium called space (the granular dynamics fixes the upper limit of absolute speed and causes the increase of mass to the objects accelerated in various fields). If the absolute speed of an object gets closer to the relativistic zone, no matter how it moves in regard to other frames of reference, its local time passes slower and its mass increases. A similar phenomenon happens when that object is located in a strong gravitational field; all its internal movements and oscillations are slowed down. In order to evaluate correctly these changes, the absolute speeds of the material bodies have to be always known (as the *Theory of the Absolute* specifies).
- The *causality and determinism* that characterize our universe are two direct consequences of its pure mechanical nature; in this way, predictable rules of any interaction of matter and fields are automatically established. They both have origins in the universe's creation event, when the granular matter was generated in a special and unique mode. Moreover, as the primordial and absolute features of matter are maintained over time, these concepts of causality and determinism will always be present, at any scale.
- Time is not a fundamental quantity; it derives from the movement of matter, from its rules and limits imposed by the constant granular speed, to be precise. At granular level, time is absolute; however, in different frames of reference, the usual, macroscopic time (the one we can actually measure) does not flow at the same rate; it dilates once the absolute speed of a material body gets to the relativistic range of speeds.
- The *supermassive black holes* have now new descriptions of their inner layers; it is very plausible these layers to be made of pure granular matter in an extremely compressed form. Also, there is a new hypothesis regarding their existence within the distributed model of the universe's birth.
- *Photons* are no longer waves of electric and magnetic nature but granular structures of a very special shape. However, their wave particle duality may be kept, and the Maxwell's equations are all still valid in my granular interpretation (where they are in fact structures of additional fluxes).

- Energy represents the main feature of the spatial granules, a primordial impulse of absolute nature that was evenly distributed in all spatial directions; it is neither created nor lost when matter and different fields are interacting. I found out that any type of energy, the energy of any field or of any kind of matter, is in fact a particular granular structure. This structure is a distinct group of granules (additional granular fluxes in photons or compact granular groups inside particles) that exceeds the average local density of space and which may have a constant or dynamic shape. This also justifies the energy-matter equivalence for any granular formation or energy pattern that may exist.

## **Next projects**

I am interested in taking more steps on the path this theory has opened: a few experiments to prove some important parts of it, several computer programs for granular simulations, new formalism for the most important laws of physics, and more. Any collaboration ideas, any funding, or any critique with serious arguments will be much appreciated.

- To build a better computer simulation for the elementary particles and their fields (especially the gluonic one).
- Making an experiment to prove the discrete nature of gravity.
- Designing an experiment to prove the granular nature of light (photons).
- An experiment to reflect the absolute frame of reference imposed by the space granularity.
- Design and implement a new formalism for all fields, which will be only based on the space granularity and on its working mechanism.
- To complete *The theory of granular gravity* with a new subquantum formalism.

## Contact

Anyone, who may agree more or less with my new theory, is welcome to send comments and impressions. So, do not hesitate to contact me with any matter regarding this theory and the related experiments; my personal e-mail address and my Facebook pages are:

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