

# The Theory of the Chain Reaction

## Abstract

The “theory of the chain reaction” is a new theory, for the creation of the Universe, the Universes, the Antiuniverses and the whole Cosmos, from the elementary particles to infinity

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–A new attempt to explain the creation of the Cosmos–

According to the theory of the chain reaction, initially there was absolutely nothing in the Cosmos. The whole Cosmos consisted of a huge absolute void space. At a certain moment and while this situation predominated, the following event, –as a natural abnormality– happened. This event was the creation of an elementary particle, in the form of an entity without *mass* or *dimensions*, which the theory named it “*pointon*”. The theory considers this event, the simplest and the most possible and reasonable event that might have happened at that moment. The only characteristic of the pointon was its charge that was equal to  $1/3$  of the charge of the proton.

As a reaction to the abnormality that created the pointon, in no time opposite entities were formed, the elementary particles “*antipointons*”, which had opposite charge equal to  $1/3$  of the charge of the electron. This reaction was once more considered as a new abnormality; for counterbalance, new pointons were formed. Thus, a lightning fast chain

reaction started, which formed pointons and antipointons. This reaction continues until our days, at the boundaries of the Universes and the Antiuniverses. The total of the energy of the particles formed was “zero” and their only property was their charges.

The charges of the pointons and antipointons, created an electromagnetic interaction between them, caused an attraction between heteronymous particles and repulsion between the homonymous ones. Thus two opposite trends were created; attraction, which aimed to cause self-destruction and mutual elimination of the particles so that they would end in their natural whole and in their natural total energy, of zero; and repulsion, which aimed to protect the particles so that they would form then the elementary components of matter and antimatter. These trends were the “*electromagnetic forces*” accepted today by physics

The attraction and repulsion between pointons and antipointons were manifested as a simple interaction, without the need of interference of any medium or any substance among the particles that might result in this interaction. On the contrary, the cleanest the void between the pointons and the antipointons, the more perceivable their interaction would be. “Pointons”, “antipointons” and the “electromagnetic forces” are the only “necessary” and at the same time “absolutely sufficient” elements that formed the Universe, the Universes, the Antiuniverses, as well as the whole Cosmos.

The pointons and the antipointons moved immediately after their formation at speeds respective to the speed of the electromagnetic radiation. Sometimes collided and mutually destroyed and other times entered in “rotational orbits” around the opposite particles and created various combinations that resulted in the particles, “*quarks*” and “*antiquarks*”, “*electrons*” and “*antielectrons*”. The quarks and electrons formed from pointons and antipointons were charged particles as well. However, they possessed two additional characteristic properties that the pointons and antipointons did not possess. These properties were the “*mass*”, which was manifested as a very small residue of the sum of the attractive and repulsive forces applied due to the interactions between the charges of the pointons and antipointons, and the “*dimensions*”.

*The above residue of the sum of the attractive and repulsive forces was formed when the charged particles, pointons and antipointons, entered in rotational orbits around their opposite particles. So, instead of a complete counteraction of the forces applied between their charges, when the latter entered in rotational orbits, a very small residue re-*

*mained that created the masses. This residue represented in general a very small force compared to the initial electromagnetic forces. So, its effect remained unperceivable during the initial stages of the creation, as the interactions caused by the electromagnetic forces of the charges prevailed by far.*

In the same way in which quarks, electrons and their antiparticles were created from pointons and antipointons, then **“protons”** and **“neutrons”**, the particles that constituted the nuclei, were created from quarks and antiquarks. Certainly, at the same time the above particles were formed, a series of many other particles were also formed, but in very small quantities. These were mainly various unstable, charged particles, which, next, did not actively participate in the creation of matter and antimatter.

From the protons and neutrons and their antiparticles, the **“nuclei”** of Helium and Antihelium were formed. The nuclei of Hydrogen and Antihydrogen had already been formed since they are made up of simple protons or antiprotons. The electromagnetic forces played once more a primary role in the formation of the nuclei, but through a somewhat different mechanism than that of the “rotating orbits” that formed the quarks and antiquarks, the electrons and antielectrons, the nucleons and antinucleons. This mechanism resulted in the **“strong nuclear force”** between the protons and neutrons. Together with the protons and neutrons and the strong nuclear force, the **“dynamic equilibrium of the nucleus”** which is the property that makes the protons and neutrons to be repulsed when they come closer than a certain distance, was created. So the protons and neutrons coexist into the nuclei and not self-destructed.

Then, from the nuclei of Hydrogen and Helium and the electrons, the **“atoms”** and **“antiatoms”** of Hydrogen and Helium were formed. The atoms and antiatoms of Hydrogen and Helium that were formed possessed three characteristic properties different from the properties of the charged subatomic particles that had already been created. Specifically, the atoms and antiatoms, according to their first characteristic property, behaved as “neutral” particles and so they did not react powerfully with the other charged subatomic particles. So they were not self-destructive. The second characteristic property was a very small interaction between them with exactly opposite properties to the properties of the interactions of the charged subatomic particles. Therefore, the atoms were attracted to each other instead of being repulsed as homonymous particles would. The same happened with the antiatoms too; however, at the same time repulsion was produced between

atoms and antiatoms, instead of attraction, as today science accepts. This repulsion between atoms and antiatoms, had the same magnitude as the attraction between atoms or between antiatoms.

These forces between the atoms and between the antiatoms had the same characteristics that had the “electromagnetic forces” but were manifested with a much lower power  $-10^{-36}$ – and thus they appeared as most downgraded forces. These downgraded forces are the “*gravitational forces*” as physics accepts today.

A third property developed between atoms and antiatoms is that, when they got very close to one another, the “gravitational forces” that according to the universal law of gravity should become infinite, on the contrary, they became zero. This, third property, together with the first and the second one, are the elements from which the stabilization and the formation of matter and antimatter and then the creation of the Universe, the other Universes, the Antiuniverses and the whole Cosmos created.

*The third of the above properties of the atoms, i.e., the fact that their attraction force is reversed in small “atomic” distances, has remained until now a hidden property and is mentioned as a basic atomic property for the first time in this work. We shall name this property “dynamic equilibrium of the atoms” due to its similarity to the property of the “dynamic equilibrium of the nucleus”. I shall analyze the details of all the above described mechanisms in the third book of the trilogy of the creation, where I shall discuss the theory of the formation of matter and antimatter.*

After the formation of the atoms and antiatoms, the Cosmos consisted of an infinite void space and inside it a cloud of pointons, quarks, electrons, protons, neutrons, nuclei of helium and atoms of hydrogen and helium, with the corresponding quantities of their respective antiparticles. The basic characteristic of this cloud was that, taken it as an energy sum, it had “zero energy”. Hereafter, in the theory of the chain reaction we shall call this cloud “*cosmogenic gas*”.

The new properties of the atoms and antiatoms from the properties of the other subatomic particles had a stabilizing effect and created groups of atoms and groups of antiatoms within the cosmogenic gas. These groups were “the masses” and “the antimasses”. The groups separated in groups of masses of Hydrogen and in groups of masses of Helium with the respective groups of antimasses of Hydrogen and Helium.

The groups of masses had the property to be they attracted by one another. The groups of antimasses had the same property to be attracted too. However, the groups of masses and of antimasses formed had the property to be repulsed, as approve it in the book “The Real Grand Unification”. The main result of these properties was that:

By the property of the attraction, the groups of masses and the groups of antimasses formed, were concentrated in very large quantities and then separated in huge clouds of masses –of Hydrogen or of Helium– and huge clouds of the respective antimasses that were continuously increasing without to have a self-destruction between them. On the other hand by the property of the repulsion, an accelerated movement between the masses and between the antimasses was created. This movement separated the clouds of masses from the clouds of antimasses and then, it formed the Quasars –Protogalaxies–, the Solar systems, the Stars, the Galaxies, the Universe as we know it, the Universes, the Antiuniverses and the whole Cosmos.

The process produces the cosmogenic gas continues until our era at the boundaries of the Universes and the Antiuniverses, where cosmogenic gas is produced in enormous quantities, from which matter and antimatter is produced in continuously and increasing quantities at rates of geometric progression. Matter and antimatter produced, feeds continuously the existing Universes and Antiuniverses while creates new Universes and new Antiuniverses.

Anyway, recapitulating, we may say that today we live in a Cosmos that begins from the elementary particles, pointons and antipointons, and extends to enormous distances that reach infinity. In this infinite Cosmos, with the infinite dimensions, the Universe, the Universes and the Antiuniverses consists huge subsets compared to the dimensions people are used to. However, these subsets are infinitesimal compared to the size of the whole Cosmos.

...and concluding we can say...

*“That is the Cosmos and so it is Created. !!!”*

Additional information on this summary can be found in my books “From the Inside of Quarks and up to Beyond the Universe” and the “The Real Grand Unification”

### **Comments**

The idea of the chain reaction came from the mere observation that all the matter and antimatter of our Universe and the rest Universes and Antiuniverses was created by elementary particles and antiparticles. So the first step of our research was the discovery of the mechanism that created the elementary particles and antiparticles.

The discovery and establishment of the mechanism of the chain reaction was very successful since, in addition, all the fundamental forces were created with the same mechanism too. Then the success of the mechanism was sealed when in the development of theory the questions of other theories were turned into answers etc. etc. ... but let the rest be judged by the reader, after the studying of the theory.

The only thing I want to add is that the chain reaction theory after its recognition and acceptance will create a very strong foundation for the formulation of "theory of everything," but it is still too early for such a discussion. ...

V.T

### **P.S**

Please do not hesitate to ask me for any question. I will answer all the questions.

### **References**

V. Talios, “*From the Inside of Quarks and up to Beyond the Universe*”, Nova Science Publishers, Inc. (2011).

V. Talios, “*The Real Grand Unification*”, Laplambert Academic Publishing (2016).