1. INTRODUCTION

No result of observation that will be considered a real experiment has been obtained so far on dark matter, dark energy, the presence and structures of black and white holes [1-11]. However, theoretical ideas and opinions were adopted regarding their existence. Therefore, it is believed that as we find out the traces believed to be the remains of the past, the events in the past will be shed light on [12-16]. The hot and cold cosmic microwave backgrounds that will support these remains are reported to be observed on NASA's Web page.

Various ideas, opinions, comments, and theories have been put forward on the structure and formation of cosmic bodies, and the expansion of the universe [17-34]. There are different opinions on the Big Bang explosion on the NASA's Web page [30-31]. There are also very different views explaining that the item speed at the time of this explosion were $10^9$km/s and $10^{10}$km/s and that the temperature was between $10^3K$-$10^5K$ [17]. It is also claimed that unusual information has been obtained on the galaxy formation [35]. It is also observed in the NASA's images (cosmology history, WMAP image) that there are small particles at the beginning of time.

According to Hubble constant expansion, the expansion of the universe is claimed to be between $2,11 \times 10^{21}-1,5 \times 10^{22}$ Mpc. The formation and the structure of the universe is expanding at this rate, this means that it var-

According to the Hubble constant expansion, the expansion of the universe is claimed to be between $70-500$ Mpc. Therefore, it is believed that as we find out the traces believed to be the remains of the past, the events in the past will be shed light on [12-16]. The hot and cold cosmic microwave backgrounds that will support these remains are reported to be observed on NASA's Web page.

The fundamental particle also exists in the formation of particles in the structure of all models. As these fundamental particles come together with more than one particle, they compose a larger upper particle. Likewise, when these upper particles combine, larger and new upper particles are formed. This formation reaches the final structure when matters, galaxies, or stars become stable. In other words, the matters or the general structures that we see and measure in our world are the stable and the atomic and molecular structures in the current conditions. It is possible to see the same structures in any place of the universe where the same conditions exist. However, the existence of the fundamental particle cannot be measured using current technological measurement instruments under normal conditions; the fission of large structures occur more in the deep structure. It is not possible to achieve under today's conditions since the big energy and the speed that existed at the beginning of time are not achievable.

2. PRINCIPLE OF FUNDAMENTAL PARTICLE

The physical and chemical events in the nearby universe and on our Earth occur at the atomic dimension of matter. There are many known and unknown particles that compose this atom, and there are various different theorems aiming to describe these particles. In fact, the events in the big bang occurred at the “fundamental particle” level of the matter. In the subsequent events, the fundamental particles compose new particles by combining with each
The energy of fundamental particle is defined as $E = M \times e$ \times F_1 \times F_2 \times F_3$ \[42\]. In this equation, $E$ is defined as the energy of fundamental particle, $M$ as mass, $F_1$, $F_2$ and $F_3$ as the particles of the three-dimensional non-uniform operating frequency, $e$ as the mass binding energy of electron volt particle, and $V$ as the speed, which is close to the speed at the initial conditions. The size related to this particle is the possible largest values. It is never possible to reference values for the systems in tranquility. In other words, these are theoretically the highest possible values. The analysis of the equation is provided as follows:

1. For the special case of $F_1 = F_2 = F_3 = M = e = 1$, the energy is $E = V^2$. In other words, the frequency, due to the speed of the particle, becomes closer to $F_1 = F_3 = F_3 = 0$, and while the mass reaches smallest form, it also comes close to $E = e$. This is a special condition case as the particle does not vibrate in its space. While the particle reaches its highest speed, the mass has the smallest volume by shrinking. In the opposite case, when the speed gets slower, the particle swell at the same rate. That is, as the matters accelerate, their volume gets smaller, and their frequencies are reduced. The negative gravity force of the speed first leads the matter to shrink, and as the speed increases, so does the density of the matter. Then, the mobility of the particle decreases, which might then turn into the fundamental particle.

2. When the case is $V = 1, M = e = 1$, the matter in in tranquility, $F_1 = F_2 = F_3 = 0$ is valid in this case. The frequency value obtains the maximum value, and the speed is stable and creates the suitable environment for the formation of atomic structure. The mass speed now becomes the stable case speed, and the mass is in the form of the possible largest structure and volume. In this case, the atomic and molecular system is formed, and the matter has now its system. If there is no stable system, the system continues its activities in order to become balanced and stable. The variables in the energy equation never achieve the accepted values except the initial conditions since the system is stable for the fundamental particle. The functional energy equation applies for the other cases. This case is shown as below:

The formation of the fundamental particle is only possible at the expected maximum speed. This occurs due to the highest speed and pressure. In other cases, the atomic particle structures of an upper level are formed. When the speed is $1 \times 10^9$ $\text{Km/s}$, there exists only the fundamental particle. At this speed, the frequency, theoretically, has the value of zero as a special case with no space in the structure, and the density has reached its maximum value. In our opinion, masses shrink when their speed increases, and when the speed becomes close to the initial speed, their volume shrinks to the dimension of the fundamental particle and their density increases. They never develop completely into energy. These compressed matters, with the speed decreasing, tend to swell. If their speed is slow enough, then the matter takes the atomic and molecular form.

What we really know is the current form of the matter. Going through various stages, the matter has its current structure. There are various theorems in Physics on the structure of matter. Some of them have been accepted and partially confirmed through experiments; however, they still fail to account for some cases. Therefore, it is aimed to explain these cases through different theorems.

3. THE MATHEMATICAL MODEL

The energy equation developed for the fundamental particle of matter $E$ is

$$E = M \times V^2 \times \epsilon \times F_1 \times F_2 \times F_3$$ \[1\]

in the absolute form of energy equation. ($x$) in the equity represents the simple arithmetic multiplication. From this equation, $dE/dt$ functional energy equation and the relationships between the other variables have been derived. These are defined as

$$\frac{dE}{dt} = M \times V^2 \times \epsilon \times \frac{dF_1}{dt} \times \frac{dF_2}{dt} \times \frac{dF_3}{dt}$$ \[2\]

$$\text{Energy, } \frac{dE}{dt} = M \times V^2 \times \epsilon \times F_1 \times F_2 \times F_3$$ \[3\]

$$\text{Mass, } \frac{dE}{dt} = M \times V^2 \times \epsilon \times F_1 \times F_2 \times F_3$$ \[4\]

$$\text{Velocity, } \frac{dE}{dt} = M \times V^2 \times \epsilon \times F_1 \times F_2 \times F_3$$ \[5\]

$$\text{The binding energy, } \frac{dE}{dt} = M \times V^2 \times \epsilon \times F_1 \times F_2 \times F_3$$ \[6\]

$$\text{Frequencies, } \frac{dE}{dt} = M \times V^2 \times \epsilon \times F_1 \times F_2 \times F_3$$ \[7\]

$$\text{Three-dimensional functional frequency movements, } \frac{dE}{dt} = M \times V^2 \times \epsilon \times F_1 \times F_2 \times F_3$$ \[8\]

and in the equation, they represent the cases of combined frequency at the axis of $i=0,1,2,3$ and $x, y, z$. When frequencies are matched with the other variables, it can be defined as

$$\frac{dE}{dt} = M \times V^2 \times \epsilon \times F_1 \times F_2 \times F_3$$ \[9\]

$$\text{and the axial resonance frequency of the particle, } \frac{dE}{dt} = M \times V^2 \times \epsilon \times F_1 \times F_2 \times F_3$$ \[10\]

$\text{and the axis resonance frequency of the particle, } \frac{dE}{dt} = M \times V^2 \times \epsilon \times F_1 \times F_2 \times F_3$ \[11\]
When masses speed up, their volume decreases. The mass is compressed; their density increases. The higher the speed is, the smaller the volume of the matter becomes. When the speed of the matter decreases, the volume of the matter begins to expand at the same rate. It is under these conditions that the structure of the matter is formed.

If, due to any reason, the matter reaches a higher speed than its condition in tranquility, the volume of the matter continues expanding and returns to its previous state as it begins to slow down. Thus, volume shrinkage or mass volume change occurs due to the structure of the matter, rather than the recycle of mass energy.

We believe that it would be an appropriate approach to divide the space into two while analyzing it. The first one is the masses composed of elements and matters similar to the structure on Earth. The second one is the great masses of matter that are different from the structures of matter and element on Earth, that cannot be seen or measured through the existing technology or whose characteristics are unknown. It is not possible to know, see, and sense these masses through the technology that we have. However, we think that they can or should theoretically exist.

A standard structure may not exist in the elements in the space. On the contrary, matter can take various forms under the space conditions. This is due to the characteristics of the conditions. Unlike the common belief that the structure of the matter is similar to the ones on Earth, they might exist in various forms, names of which we cannot know yet. It is also possible under the conditions of space that new particles will create new particle blocks, thereby leading to the existence of new structures whose characteristics we cannot know. The requirement for this formation depends on speed, heat, pressure, force and energy that are visible or not visible.

4. CONCLUSION

In this study, a mathematical model has been developed related to the “fundamental particle” that composes the structure of the matter. The particles and sub-atomic particles forming the matter are formed through the binding of this fundamental particle in various structures, numbers, and forms. There is not any standard structure in the structure of the elements in the space. Depending on the conditions, new particles, new blocks, and new structures may also exist. The requirement for this is speed, heat, pressure, visible and invisible force and energy.

All types of energy force are a special case of a group of particles, or a particle that exists and in this case are the visible, invisible, measurable or unmeasurable energy, or the effect of force and power.