Solving the Problem of Dark Energy and Dark Matter By Reviewing the Basic Law of Physics

In 2016, a BBC science documentary entitled "The Mystery of Dark Energy" was produced for the BBC's Horizon Documentary series, in which scientists spoke about the issue and its new achievements. This article is the answer of the ambiguities of that video.
Within the world we live in, are many things that we see and so many things that we do not see and we are unaware. Let's go back to the beginning of existence. When this world of ours was a very, very compressed globe, with very high temperature, in which mass and energy were so interconnected and compressed that no separate mass and energy could be conceived.

Dark Energy

At First, by special methods, we obtain the initial energy of the Big Bang. Using simple calculations, with appropriate approximation, the energy in the moment of the Big Bang is $10^{110}j$ to $10^{120}j$ which is very, very high. Next we calculated the amount of consuming energy from the moment of the Big Bang to the present, which is 14 billion years. The consumed energy for creation of sub-photons, photons, electrons, protons, neutrons, atoms, stars, galaxies, structures, etc. is more than 10 % of the Big Bang's energy, and it could easily be obtained that about 90 % of the Big Bang's energy has remained.
From the beginning of the equilibrium or homogeneity of the universe, this remained energy has caused the expansion of the Universe so that the structure of systems and galaxies remains constant, but most of the galaxy, due to their structure, is moving away and their speed will also increase. It should be noted that what drives them away, is the initial energy that started from the Big Bang moment and continues to this day and will continue to do so. In fact, dark energy has been around since the beginning of the Big Bang, but after the equilibrium or homogeneity of the universe, we found its effect. So the energy applied in the universe is the residual primary energy or the dark energy. For example, when a large dam break many roaring waves flow travel several thousand kilometers and in the end reach a relative calmness near the shore. If the galaxies were not distant from each other, we might never find dark energy.

It could be said that the universe is like a large sphere rotating around itself (like rotating of the moon around itself and around the earth, the earth around itself and around the sun, the sun around itself and around the Milky Way and the Milky Way which revolves around itself and around the hypothetical center of the universe).You should consider that when the huge explosion ,the Big Bang, was first created, each particle of that compact object expands at a very, very high velocity in the n directions, and because it has very, very high velocity and acceleration, if there was not any rotational and spiral motion, these

particles would never form the stars and galaxies, and the universe ,that existed, was like a very large sphere of dust.

We also have to note that this large sphere is growing from inside to outside. So the sphere of the universe has two linear and rotational motions. Given that the universe has reached certain homogeneity and equilibrium, all its points are interconnected by their particular gravitational force. Consequently, while the world is rotating, all its points are rotating all together. But at the same time, considering that it expands from within, each point of that has a linear motion plus a rotational motion. Therefore, we have two velocities, linear velocity ($\vec{v}$) and tangential velocity ($\vec{v}'$) whose total is equal to ($\vec{V}$):

$$\vec{V} = \vec{v} + \vec{v}' \qquad (1)$$

Our linear velocity ($\vec{v}$) is the effect of the dark energy or residual energy. But let's see how our tangential velocity ($\vec{v}'$) is:

$$\vec{v}' = \vec{\omega} \times \vec{r} \qquad (2)$$

It should be noted that since there is no external force ($\vec{F}_E$) to change the rotational velocity of the universe, the angular velocity ($\vec{\omega}$) is always constant.

$$\vec{F}_E = 0 \qquad (3)$$

$$\vec{\tau} = \vec{r} \times \vec{F}_E = 0 \qquad (4)$$

$$\vec{\tau} = I\vec{\alpha} = 0 \qquad (5)$$

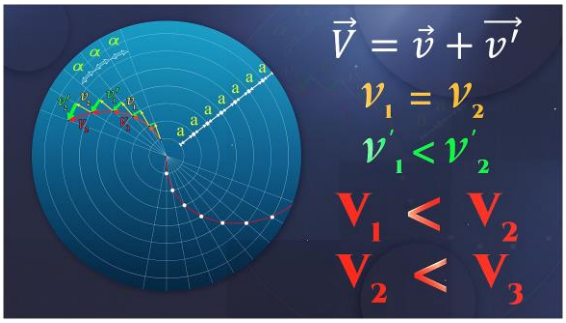
$$I \neq 0 \Rightarrow \vec{\alpha} = \frac{d\vec{\omega}}{dt} = 0 \qquad (6)$$

$$d\vec{\omega} = 0 \Rightarrow \omega = constant \Rightarrow \vec{\omega}_2 = \vec{\omega}_1 \qquad (7)$$

Where, $\vec{\tau}$ is torque, $\vec{\alpha}$ is angular acceleration and I is the moment of inertia for celestial objects.

Thus, we conclude that our tangential velocity depends on the variable $\vec{r}$. The more the radius ($\vec{r}$) the more our tangential velocity ($\vec{v}'$) is. Accordingly, the variable parameter of the tangential velocity ($\vec{v}'$) is the radius of rotation ($\vec{r}$) from the center of the universe or from where the Big Bang begins. After all, as the saying goes, as dark energy expands the radius of the universe, the radius of rotation and the universe's $\vec{r}$ is always increasing, and consequently our tangential velocity ($\vec{v}'$) is always increasing. It should be considered that dark energy increases $\vec{r}$ and, secondarily, increases the tangential velocity ($\vec{v}'$).

We have to see the Big Bang as a huge explosion that has given a primary energy to everything and it expands the universe, and its effect has given a uniform velocity to everything which moving away from the center of the universe and from the beginning of the Big Bang.



But when the telescopes observe a corner of the sky and find points, they certainly have increasing velocity, and always:

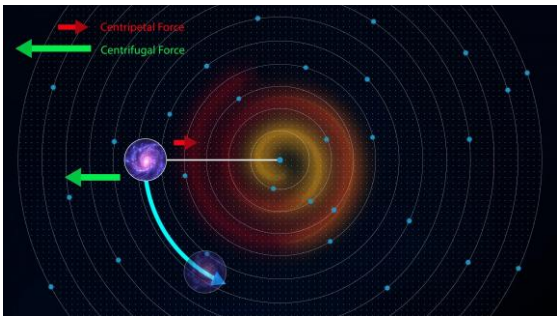
$V_2 > V_1$ (8)

$V_3 > V_2$, … (9)

That will increase over time. Which is due to the dark energy that changes the $\vec{r}$ and increases the tangential velocity ($\vec{v}'$), thereby increasing the total velocity ($\vec{V}$) of each object in the sky. We must remember that the dark energy and initial energy have been contiguous, have always been, and always will be. Dark energy is actually the reduced initial energy that is continuous.

Dark Matter

Our highly dynamic world is always looking for its relative balance. The world revolves around itself, and if we assume the current radius of the universe to be $10^{24}\ km.$ and, in calculating its velocity, if we use the rule of displacement over the time of a period and assume that $^1/_{10}$ of the lifetime as a period of rotation, we will reach very, very high velocities. That this ball is rotating with such a very, very high velocity, and as a result of this velocity and rotation a spiral centripetal force is created and all parts of this world are affected by it, which is the beginning of the creation of black holes and galaxies. This spiral centripetal force, which brings objects closer together in the universe, is called vivid force or Dark Matter.



Note that the definition of a dark matter that passes through everything and is everywhere is actually a definition of a force, the vivid force or Dark Matter.