Subject: Science Article: 35

The Great Attractor

Doç. Dr. Haluk BERKMEN

When we observe the universe, we encounter a universal rotational movement wherever we look. Electrons are rotating around the nucleus of the atom, the moon is rotating around the earth, the earth is rotating around the sun, the sun is rotating around the Milky Way and all galaxies are being attracted towards **The Great Attractor**. The Great Attractor is located at the center of the **Laniakea Supercluster**, in which the Milky Way is located. All galaxies within the Laniakea Supercluster are "redshifted", indicating that they are receding relative to us and to each other. In the drawings below, we see that all galaxies are moving towards, or rather being attracted by The Great Attractor.



In a previous article entitled "**A Curved Universe**", I claimed that the universe is like a Klein Bottle. It is presently expanding but some billion years from now, it will start to contract. The movement of expansion and contraction is a never ending motion of rotation. As mentioned above, since rotation is observed all over the universe, I am of the opinion that the universe itself is in a motion of never ending rotation. How can we explain this fact?



Let us first consider the lifecycle of the stars. As seen in the drawing above, all stars start their life cycle as a cloud of chaotic particles or molecules. This nebulous formation is called a Nebula. Under the influence of gravity, the Nebula takes the shape of a sphere and becomes a glowing star. After several billion years the star expands to become a Red Giant. This is because the core of the star becomes very dense and due to energy conservation, the corona needs to expand. But this expansion does not stop and results in a great explosion. The star is now called a Supervova. After a Supernova explosion many star particles become dispersed in the surrounding region. These particles will eventually become the seed for a new star. The remaining core can either form a Neutron star or a Black Hole.

The life cycle of stars can be a model for the lifecycle of the universe. I claim that our universe follows the same pattern and is presently in its expansion phase. After that phase the universe will explode, similarly to a Supernova. This explosion is what is presently called the **Big Bang**. In the present model the Big Bang does no start from a singularity, but is a necessary phase within its rotational lifecycle. I call this phase "**The Great Explosion**" and not The Big Bang.

After the Great Explosion, there will remain a huge Black Hole. A new universe will start to coalesce from the remnants of the Great Explosion and will be attracted towards the huge Black Hole. This Black Hole is what we observe as being the Great Attractor. We don't see the Black Hole, but we see that all galaxies are being attracted towards this region of the universe. Here is the drawing of my understanding of the lifecycle of the universe:



This model fits to the present model of how the universe started. The Cosmic Background Radiation is the signature of the Great Explosion. In this model we do not need to accept a period called "Inflation", since the universe expands in a rather slow pace.

[1] http://www.halukberkmen.net/pdf/261.pdf