

The analysis presented in the article *Big Bang* can be supplemented by further information.

The Real Structure of the Universe

Actual observation of the stars has led to an impression of the structure of our universe (which is correct only within our accuracy to measure star mass and distance). Current thinking is that our real universe has a form like a mass of soap bubbles. Relatively dense strings of galaxies form the lines of interface between bubbles and large volumes of empty space are the actual bubble volumes between the strings of galaxies. At length scales above 70 mpc/h (roughly, the average diameter of the bubbles), the universe starts to become homogeneous.

Our own Local Group (of galaxies) is a very small collection of galaxies compared to most galactic clusters and the more famous Superclusters from which we gather most of our data. From the article *Big Bang*, it is easy to see why larger clusters and Superclusters would be red shifted as observed by our Local Group (equation (68) from the article *Big Bang*). This is due to their larger mass, a type of red shifting that is also evident from current methods (using equation (61)).

But this red shifting should also be taken in context of Figure 16. Convert the observer planet M_o to our Local Group and convert the M_{ei} planets each to a similar sized group of galaxies and the red shift becomes apparent, even though current methods would indicate that no red shift should take place. Now think of what happens when the M_{ei} planets of Figure 16 were Superclusters surrounding a smaller emitter cluster, M_e , which is a cluster similar to our own. Red shifting would be further emphasized. This red shifting would happen even if the emitter M_e was smaller than our Local Group.

This type of red shifting is even more important when it is recognized that the farther away galaxy clusters are from us, the larger they will have to be if we are to accurately observe them. In other words, it is hard to see small emitters when there is a Supercluster encroaching on our view of the small emitter. Could inaccuracies in seeing what is actually so far away also be influencing our understanding of the red shift data? Do we fully understand the effects of gravitational lensing on these observations?

Other Thinking

There are other reasons to believe that the Big Bang theory is incorrect. To start with, a homogeneous distribution of stars throughout our known universe is inconsistent with a bang of any kind. No other explosion phenomenon distributes matter in this way, and especially not known forms of star explosions.

Also, all stars are receding from us at about the same rates in all directions. That means that earth just happens to be at the original center location of the big bang. Considering

the vast size of the galaxy, the probability that our planet just happens to be at the original center is virtually zero.

Also puzzling are results such as recently announced that galaxy UDFy-38135539 is located 13.1 billion light years from earth while the Big Bang occurred 13.7 billion years ago. The light we are receiving now from this galaxy is said to have been emitted only 600 million years after the Big Bang. But if that light has been traveling to us for 13.1 billion years, then galaxy UDFy-38135539 was already 13.1 billion light years away from us when that light was first emitted. How did it get that far away from the center (our Local Group) only 600 million years after the Big Bang? It's materials would have traveled away from the center of the Big Bang at speeds many times the speed of light, yet would still have had time after this violent journey to form into a galaxy held together by weak gravitational forces.

Summary

Back when people thought that the earth was the center of the universe, some scientists had noticed that various stars in the sky had smooth arcing trajectories over the course of a year and other stars had odd zigzag trajectories. The expert scientists, who were heavily invested in the geocentric theory, came up with all kinds of strange machinations to explain how some stars could zigzag while others traveled smoothly. These experts were protecting their incomes and prestige, and they prevailed for many years mainly by silencing their critics. Those who blindly followed their lead eventually found their own prestige to be discredited, as the truth eventually became so obvious that no power in the world could silence it.

There are a number of fantastic explanations for the problems brought about by the Big Bang theory. Now we have theories on the metric expansion of space and all kinds of matter and energy that have never been seen or measured. But they must exist if the theory is to prevail. I do not know how the universe began and do not know how it will end. I do not know the structure or contents of space in the vast voids between the galaxies or in any other location in the distant cosmos. Neither does anyone else. But since all Big Bang theory depends on red shift data, I think that close examination of red shift theory is in order. Those who chose to blindly follow the Big Bang leaders (or my theory) run the risk of missing the truth and wasting their careers.