

Explanation of the Galaxy Spectrum Redshift Phenomenon ----The New Discovery on How Light Works

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Abstract: The problem of galaxy spectral redshift is currently considered by the mainstream scientific community to be due to the Doppler effect. The light emitted by a distant galaxy moves toward the red end when it leaves us, and the farther away the galaxy is redshifted to larger the amount. At the time, scientists concluded that all galaxies were regressing and that the universe was expanding from a singularity explosion.

This is the basic framework of human understanding of the universe so far. If a widely accepted theory of non-such galaxy redshift is proposed, it will undoubtedly overturn the basic cognition including the expansion theory of the universe. To explore the problem of galaxy redshift, first assume that galaxy redshift is not caused by galaxy regression, then we must find the cause on the galaxy itself. The change of galaxy energy will reflect on its emitted spectrum, and then according to the farther galaxy redshift amount, Large features can be analyzed to the farther galaxies are longer in time. In this way, the greater the energy attenuation of the galaxy, the greater the amount of redshift in the spectrum emitted by the galaxy.

And I think that light is operating in one-dimensional space, and this way of operation is an important prerequisite for establishing a new cosmic space-time structure and a relative space-time system.

Introduction

I have been thinking about the theoretical physics for almost two decades. When I first bought a book by British theoretical physicist Stephen Hawking's "A Brief History of Time" in the bookstore. It can be said that "A Brief History of Time" has profoundly affected me. As I have learned more, I have also learned something. During the time, I have to consult related materials, including physics basic textbooks for middle school students. The internet search problem is really convenient. Stepping forward in this way and stepping forward also cultivated this fearless spirit that I dared to challenge previous theory. I can't agree with the theory that the galaxy's spectral redshift causes galaxy to recede. It is also because I have been thinking about theoretical physics for so many years. In the past two years, I have come to think that the way light operates is different from the movement of macroscopic objects in three dimensions. Light should propagate in a one-dimensional space, and being able to clarify the unique mode of operation of light is a crucial factor and the most significant discovery.

Text: In 1924, American astronomer Edwin Hubble proved that the Milky Way galaxy in which we live is not the only galaxy. In fact, there are many galaxies. Now, advanced astronomical observation methods can be used to observe endless galaxies. It is the vast universe. When astronomers looked at the star spectra of other galaxies in the 1920s, they found that the spectra of these galaxies moved towards the red end. Based on this phenomenon, scientists then came to a conclusion that this is the Doppler effect. What is the Doppler effect? In our daily life, when a car is driving towards us, the engine tone becomes higher, that is, the sound frequency becomes larger. When the car leaves us, its engine tone becomes correspondingly lower, that is, the sound frequency becomes smaller. The same principle applies to radio waves and light waves. Accordingly, when a certain star or galaxy comes towards us, the spectrum of light that it hits us will move to the red end,

and the spectrum of its light will move to the blue end when it leaves us. In the years after Hubble proved the existence of other galaxies, he took the time to classify their distances and observed spectra. Perhaps most scientists at the time still believed that the motion of these galaxies was disorderly, which was confusing. Unexpectedly, the spectra of these galaxies have a red shift phenomenon. And Hubble also found that the amount of redshift is directly proportional to the distance of the galaxy. The above is the status quo of galaxy redshift.

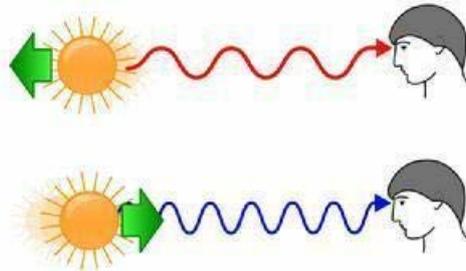


Fig1. Red shift principle

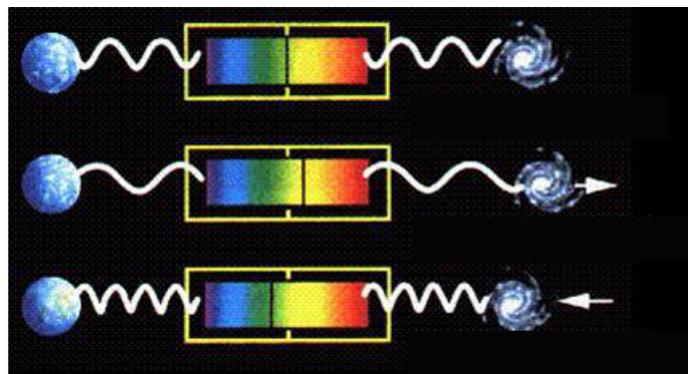


Fig2. Red shift principle, the black in the middle is the spectral line

The theory that the universe expands from the explosion of a singular point is obviously an absolute view of time and space. In time, it is believed that there is a single time arrow and in space, it has a unique direction.

Space and time should be related. Because a certain spatial distance also indicates that the passage of time, and there is also relativity in space and time. There will not be only a single time arrow in space and no unique directionality. But if humans also exist in a distant galaxy, they will observe our own Milky Way galaxy as we do not see, because the evolution of different galaxies with different space-time as the origin is not the same. In terms of large-scale cosmic space-time, with the earth as the origin of time and space, the rotation of the earth is the present time and zero time, and the revolution of the earth around the sun is the future time and the positive time. In terms of time, it is all negative, that is, a negative number in time is the past tense and the farther away it is, the greater the negative number of time.

When observing distant galaxies, the light of the galaxy is actually emitted to the earth with the galaxy itself as the time origin. At such a distant distance, time is like a cramped mat, which gradually spreads out with continuous light, so we can see the history of galaxy evolution, and the galaxies that are farther away will see the longer history of galaxies. The evolution of the galaxy is accompanied by a decrease in the energy of the galaxy. This decreasing form of energy will see the phenomenon of moving toward the red end through the spectrum emitted by the galaxy. This is the so-called galaxy redshift. A simple example familiar in life to illustrate this problem: When an iron block was just taken out in the furnace, there were two people A and B next to the iron block to observe it and you will see that the color of the iron block was initially yellow and white. At this time, one of the people B was away from the iron block. When he walked a distance and looked back at the iron block, it turned dark red. The position of A did not change but passed the iron block from yellow-white to dark red. During this time, then the person B is a yellow-white person who

left the iron block at the beginning. When he walks a distance and looks back at the iron block, it turns dark red. It should be particularly emphasized that there is no change in the position of the iron block, that is, the time that A waits for the iron block to become dark red is equal to the distance that B has traveled. For the same reason, compare this iron block to a galaxy and B to us as an observer. If the galaxy is a long distance away from us, replace this distance with time to see the phenomenon of galaxy red shift. When the galaxy is not too far away from us, the length of life as an observer is quite a large number of magnitudes relative to the evolution of the galaxy. Therefore, the evolution of the galaxy can not be seen, and the energy has not been attenuated. There will be no red shift in its spectrum.

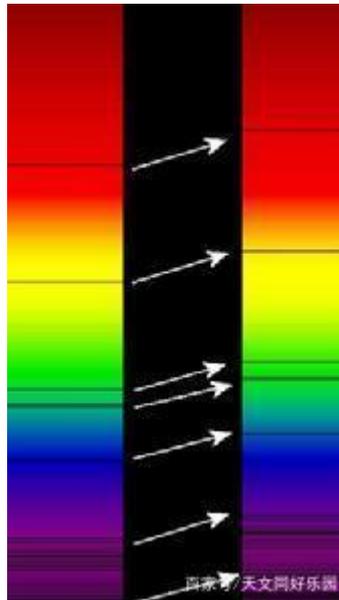


Fig3. Spectrogram, bottom dark purple, top dark red

There is a special factor that needs to be explained here: the way light operates is the same as that of planets, stars and even galaxies. Macro objects are moving in three dimensions and light is moving in one dimension. A beam of light does not automatically turn or move around an elliptical trajectory like a planet. It does not return, so it only needs one-dimensional space to move. It is further deduced that light, as a boson, moves in one-dimensional space, and fermions, as mass elementary particles, move in three-dimensional space like macroscopic objects, but only in microscopic environmental conditions. In addition, macroscopic objects themselves continue to evolve over time, but photons as elementary particles will not change. For distant galaxies, they will not move towards us or leave us because they and us Galaxies are not in the same three-dimensional space, we can only see their evolutionary history through the spectrum emitted by distant galaxies.

Speaking of the galaxy's redshift problem, quasars cannot be bypassed. This is a special type of celestial body with huge redshift and large redshift. Some quasars also have multiple redshifts. All these have challenged the theory of galaxy regression and Hubble's law. We know that the life cycle of quasars is very short compared with ordinary galaxies, but the energy is huge. When such huge energy is released in a relatively short time, there will undoubtedly be a large spectral redshift phenomenon. The root cause of the large redshift. There is also the phenomenon that the multiple redshift of quasars is also related to the huge decay of quasar energy in a certain unit time. In short, quasars are worthy of further investigation in the future.

Conclusion

The redshift of the galaxy spectrum is caused by the energy change of the galaxy itself, and because the galaxy is very far away from us, we will see the long evolution history of the galaxy in other words, its life cycle changes. The galaxy energy presented by it is gradually decreasing, so this change is reflected in the spectrum emitted by the galaxy, and the mystery of galaxy redshift

has been solved. Mass, energy, and momentum are only physical quantities that apply to three-dimensional space, and have nothing to do with the speed of light. For the large-scale universe, space and time record the evolution of the galaxy. For the small-scale, relatively independent three-dimensional space, time describes the movement of celestial bodies. Distant galaxies are not in the same three-dimensional space as us. Only one-dimensional light can pass through. This is why we can see them. Our galaxies do not orbit them, nor do our galaxies orbit our galaxies to establish direct dimensional connections in the same three-dimensional space. It can be considered that the universe is made up of countless three-dimensional spaces. With different space-times as the origin, you can see the evolution of galaxies in various spaces to different degrees.

Human beings today are fortunate. We are about to unveil the mystery of the universe and see what it is. The results of the intellectual efforts of human beings to explore the universe for thousands of years will soon be presented to everyone!

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