

# How do stars shine

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**Abstract:** The concepts of gravitational field center and sphere layer are put forward. It is proposed that the electromagnetic wave generated by the field control effect generated by the superposition of the spherical layer of the gravitational field of stars returns to their own stars under the action of the potential difference generated by the electromagnetic field cutting, and compensates for the lost kinetic energy. The overall result is that the energy of each star is always constant. It is proposed that the light of the earth is converted into visible light by the kinetic energy of the earth in the superposition region, and the visible light converted by the sun is returned to the sun.

**Key words:** Gravitational field center; Sphere of gravitational field; Field system effect

## 1. Introduction

There have always been different theories about how stars shine, but it is generally believed that stars are composed of hydrogen atoms, and the light and heat generated by nuclear fusion of hydrogen are transmitted to the planets and their moons around them, providing the energy to maintain their operation.

There are a few questions here, one is how the star controls the speed of nuclear fusion, because the energy produced by nuclear fusion should explode all the hydrogen in an instant, destroying the star, the galaxy in which the star resides, and the entire universe in an instant. One is the light and heat of the planets and moons, and if it is supplied by the star, the mass of the star will gradually decrease, the gravity on the planet will gradually decrease, the galactic balance will be disrupted, and the galaxy will disintegrate. One is that the star continues to receive energy, the temperature will continue to rise, all the matter on the star will be in a molten state, because the vacuum is insulating, the heat of the star can not escape the star itself. Of course, the star is the same, then the situation is even more serious, the star's heat can not diffuse out, the accumulated heat will detonate the star's hydrogen, instant destruction. One is the long-term practical proof that the universe is symmetrical, balanced, and conserved, and if the light and energy of planets and moons are supplied by stars, then the conservation of mass, conservation of energy, cosmic symmetry, and cosmic balance will all be destroyed. If not, how did the light and energy of stars, planets and moons come about? The answer is that they are produced by themselves, so that the mass of each star remains conserved, the energy remains conserved, and with it, the whole universe is symmetrical and balanced. Let's take a look at them.

## 2. The center of the gravitational field

We know that every star has a gravitational field, whether it's a star, a planet, a moon. Naturally, there is a gravitational force between any two stars, whether it is between one galaxy, between different galaxies, between close galaxies, between distant galaxies, or between galaxies at great distances. So, between the gravitational fields of any two stars there is a center of field, which is a point between them, and if there is an object of any mass at that point, the gravitational pull of the two stars on it is equal. And any two stars are in motion with each other, and the trajectories of their motions are generally ellipses, and we think of them as circles for convenience, so the trajectories of the field centers of the two stars are also circles, and the two circles are concentric circles, and notice that this is relative to the stationary star. We call the distance between the center of the sphere of each star and the center of the field distance, if we think of each star as a regular sphere, the field distance should be the same in all directions, and together they form a gravitational field sphere, the relationship between the two spheres is concentric, and note that this is relative to the center of the sphere. Similar to the

atmosphere, the layer of dark hydrogen molecules in the gravitational field of a star is stationary relative to the star, doing the same motion in the galaxy as the star, so you can think of the gravitational field layer, like the atmosphere, as part of the star, they are a common whole.

In order to be simple and easy to understand, we will use the sun, the Earth and the Moon as examples to study the field center of stars, planets and moons, and the important role that the field center plays.

Let's first look at the sun and the earth's field center, let  $M$  be the mass of the sun,  $N$  is the mass of the earth,  $m$  is the mass of the field center object,  $R$  is the distance between the sun and the field center,  $r$  is the distance between the Earth and the sun and  $L$  is the distance between the sun and the earth, then

$$G \cdot \frac{M \cdot m}{R^2} = G \cdot \frac{N \cdot m}{r^2}$$

$$\frac{R}{r} = \sqrt{\frac{M}{N}} = 577$$

$$\begin{cases} L = R + r = 1.496 \times 10^8 km \\ r = \frac{L}{577 + 1} = 259 \times 10^3 km \\ R = L - r = 148742 \times 10^3 km \end{cases}$$

The distance from the center of the field to the sun is 577 times the distance from the Earth, that is, the mass of the star, the distance from the center of the field is also large, the sun's mass accounts for 99.86% of the mass of the entire solar system, about 330,000 times that of the Earth, the sun's field center distance is 148,742 thousand kilometers, and the Earth is 259 thousand kilometers. You can also figure out the respective field center distance between the Earth and the Moon, the respective field center distance between the sun and the moon.

### 3. Superposition of Gravitational Field and Its Effect

#### 3.1. Where Does The Visible Light of Stars Come From ?

Since the actual situation is that the stars are not regular spheres, the trajectories of their movements with each other are not regular circles, so their gravitational field spheres are not regular spheres, and the trajectories of the field centers are not regular circles. At any point in their motion, a portion of the layer of dark hydrogen molecules directly facing the gravitational field of the two stars will be superimposed. We know that the earth orbits the sun at a speed of about 30 kilometers per second, and the earth's gravitational field is part of the Earth, the sun's gravitational field is part of the sun, so they are superimposed on the part of the earth's dark hydrogen molecules relative to the sun's dark hydrogen molecules are also rotating at a high speed, and the huge friction between the two produces a field effect, generating electromagnetic waves. We also know that every star has an electromagnetic field, two stars move with each other, and the cutting of the electromagnetic field will produce a strong potential energy, respectively, and the zero potential energy on the surface of the two stars, forming a huge potential energy difference. Any kind of energy, if it's not already active, it's potential energy, and once it's active, it's kinetic energy. The electromagnetic wave generated by the superposition of the

gravitational field of the sun and the earth is generated by the field control effect. Under the action of the potential energy difference generated by the cutting of their respective electromagnetic fields, the electrons of the dark hydrogen molecules in their own gravitational field are transmitted back to the star, that is, the electromagnetic wave of the sun is transmitted back to the sun, and the electromagnetic wave of the Earth is transmitted back to the Earth. Relatively speaking, both stars are moving relative to the other star, so the kinetic energy of the superposition is equal, the converted electromagnetic energy is equal, and the energy returned by the electromagnetic wave to the star itself is equal. In this way, the kinetic energy lost by the earth's motion is equal to the electromagnetic energy converted by the kinetic energy returned by the earth, energy is conserved, the kinetic energy lost by the sun's motion is equal to the electromagnetic energy converted by the kinetic energy returned by the sun's motion is also conserved, and the kinetic energy consumed by the superimposed part of the field effect is equal to the electromagnetic energy converted by the two. Energy is also conserved for the Earth and the Sun.

The superposition of the gravitational fields of the earth and the moon and their effects are similar, and the superposition of the gravitational fields of the sun and the moon and their effects are similar. The superposition of the gravitational fields of the sun and other planets and their moons and their effects are similar. Other galaxies, stars, planets, moons, the superposition of gravitational fields between each other and their effects, similar to the situation in the solar system. The same is true of nebulae, the whole universe is a pattern.

It should be pointed out that the mutual attraction between stars, the superposition of gravitational field and its effect are not limited to the local galaxy, but can theoretically be extended to all stars in the entire universe, so that at any time, all parts of the star have stars to attract, which will lead to the superposition of gravitational field, and the superposition will produce the field system effect and electromagnetic wave. The electromagnetic wave returns and makes up for the lost kinetic energy. It can be seen that for the entire universe, the kinetic energy lost by each star's motion will gain the same electromagnetic energy. The resulting electromagnetic energy compensates for the electromagnetic energy on the infinite components of all the microscopic particles of all the macroscopic particles (including the dark hydrogen molecules in the gravitational field) that make up the stars, and for the electromagnetic energy that is lost by all the gravitational forces that the stars (and, in theory, all the stars in the universe) need to maintain their celestial motion, so that the energy of each star remains constant forever. Stars do it, planets do it, moons do it. The energy of the stars is conserved, the energy of the planets is conserved, the energy of the satellites is conserved, and the energy of all the stars in the universe is conserved.

The difference is that the stars attract each other, and the field system effect generated by the superposition of the gravitational field is different in the type and strength of electromagnetic waves. The attraction between stars that are not in the same galaxy, the field effect of superposition of gravitational field will not produce visible light, the same galaxy, because the mass of the star is almost the total mass of the galaxy, planets or satellites, as long as the gravitational field is superimposed with the star, the electromagnetic wave generated is visible light, but the visible light irradiated to the planet or satellite, It's the kinetic energy converted into visible light that comes back, not the star's light, but the kinetic energy converted into visible light from the star itself, which is also returned to the star itself. Or take the sun and the earth as an example, the superposition of the gravitational field of the earth and the sun, the motion state of the dark hydrogen molecule is always synchronous with the earth, and it always belongs to the field of the earth's gravitational field and electromagnetic field, and the gravitational field and electromagnetic field of the stars are closed respectively. Of course, the visible light converted from the earth's kinetic energy is propagated in the direction of zero potential energy on the Earth's surface by the huge potential energy generated by the electromagnetic field cutting in the Earth's electromagnetic field. The visible light of the sun is similar, but also returns to the sun, because the sun's field center distance is much larger than the Earth, the sun's surface because of light irradiation, the temperature is not very high, but the entire solar system has a total of eight planets we are familiar with, Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune, unknown 173 satellites, Their contact surface with the sun will have electromagnetic field cutting and gravitational field superposition with the sun, will produce field control effect, and will generate visible light. In this way, the sun at any time, in all directions, left and right, up and down, all directions have returned visible light, unlike the planets and satellites, only the side facing the sun has visible light, it is daytime, the side facing the sun has no visible light, it is night, the sun has no day and night, it is always clear. Therefore, at night, we can only see the twinkling stars in the sky on the earth, and astronauts in space

are also in addition to a little light from the stars, the entire universe is completely black, and nothing can be seen.

It should be pointed out that the field center trajectory between the two stars, the gravitational field sphere of the two stars, is formed after one cycle of rotation. The same object, whether it be a star, planet, or satellite, can be attracted to any object in the system, whether it be a star, planet, or satellite; It can also be attracted to anything in other galaxies; In theory, it could be attracted to anything in the universe. In this way, the same star, and the field center orbit circle attracted by any star, there are an infinite number of corresponding gravitational fields, and there are an infinite number of spheres, but they correspond to the movement of two stars in a period. The cycle of the moon around the Earth is one month, the cycle of the Earth around the sun is one year, Jupiter is 11.8 years, Saturn is 29.5 years, Uranus is 84 years, Neptune is 164.8 years. Therefore, the field center trajectory and gravitational field sphere of two stars that attract each other have meaning only for the part of the two stars facing each other at any one time, but not for the other parts. Because, at this moment, other parts, there are other stars and it attracts, theoretically innumerable. We know that the attraction of the two stars is partial, the superposition of the gravitational field sphere is partial, the conversion of energy is partial, the energy returned to the star is partial, the compensation of the star energy is partial. The energy that a star, at any given moment, attracts and returns from a star compensates for only a fraction of the kinetic energy lost by the star's movement, and energy cannot be conserved. And in any star in the universe, at any time, up and down, left and right, in all directions, there are a lot of near stars, if you think about distant stars, there are countless stars, they will attract the star, the gravitational field will be superimposed, will produce a field effect, will generate electromagnetic waves, the sum of all the energy of the electromagnetic waves returning, In this way, the lost energy will be fully compensated, the energy of the star will be conserved, the energy of the galaxy will be conserved, and the energy of the universe will be conserved.

### 3.2.How Does The Visible Light of Stars Travel ?

The superposition of the star and the star's gravitational field sphere produces the field effect of visible light returned to the star by the dark hydrogen molecules in the star's gravitational field. The special structure of the dark hydrogen molecule, resulting in its special properties, recessive, external display is neutral, neither electrical, nor magnetic, so it will not reflect light, only by the electrons in the molecule transfer light, until passed to the dust in the atmosphere of the star and the surface of the star, it will reflect light and appear bright. Because any point on the surface of atmospheric dust and macroscopic particles on the surface of stars has both N and S poles, and any point on the surface of electrons in dark hydrogen molecules has both N and S poles, same-sex attracts, opposites repel, opposites attract distant light, and after collision, same-sex repels light, and because the energy of light is very large, What happens is an elastic collision, and the Angle of incidence is equal to the Angle of reflection, and that's how the law of reflection works. Therefore, the light we see on Earth does not come from the distant sun at all, but from a place where the gravitational field of the Earth and the gravitational field of the Sun are superimposed. The radiant sun we see is not the sun itself, but the superimposed gravitational field projected in the Earth's atmosphere.

Because the dark hydrogen molecules in the gravitational field are stationary relative to the earth, and their motion trajectory is the same as that of the earth, so the light is propagated in a spiral curve, but it is propagated in a straight line relative to the earth, and the propagation area is equivalent to the superposition area of the gravitational field sphere, until the atmosphere, and the dust scattering, the light is covered with the earth. Therefore, we can only see the twinkling stars at night, and astronauts in space are also in the dark, except for a little light from the stars, the whole universe is completely black, and nothing can be seen. If the light of the planets comes from the stars, the space of the universe is a vacuum, and the light travels in a straight line in the vacuum, then the whole universe is clear at any time, and there is no difference between day and night on any star.

In particular, the superposition of the gravitational field, the generation of the field control effect, the generation of electromagnetic waves or visible light, the cutting of electromagnetic fields, the formation of potential energy, the return of electromagnetic waves or visible light, and its scattering are always the same, and the two stars are always in relative motion, repeating, repeating, invariable, together with other stars, galaxies, nebulae, and so on. Makes up the eternal universe.

## 4.Peroration

To sum up, the discovery of dark hydrogen molecules, or dark matter, connects long-separated stars, galaxies, nebulae, multidimensional space and infinite dimensional space into a whole. The conservation of mass, conservation of energy, conservation of momentum, conservation of angular momentum, the four conservation laws, truly implemented to the entire universe. The so-called "Grand unified theory of the universe" is the original Newtonian system of classical mechanics. It has recovered the "aether" that people have been looking for, corrected the wrong understanding of "aether wind", eliminated a series of illusions brought about by the wrong concept of "vacuum", simplified a wide range of physical concepts and intricate mathematical formulas, and always connected all physical phenomena around the bond of a quantity and a force, that is, the movement of mass generates electromagnetic field. Electromagnetic field produces electromagnetic force, electromagnetic force forms gravitation, gravitation makes stars move with each other, forming galaxies, nebulae and the universe; Make baryons and leptons move with each other to form elementary particles; The unification of microscopic particles and macroscopic particles, the unification of the microscopic world and the macroscopic world, and the re-affirmation of the nature, harmony, simplicity, symmetry and balance of the universe that people have always advocated, are of indescribable importance.

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