



GLOBAL JOURNAL OF SCIENCE FRONTIER RESEARCH: A
PHYSICS AND SPACE SCIENCE
Volume 24 Issue 1 Version 1.0 Year 2024
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-4626 & Print ISSN: 0975-5896

Three Properties of Matter

By Li Xuefeng

Introduction- Let me talk about three concepts first, which may not be very accurate but I haven't found a better description. Radiation is the process by which particulate matter radiates energy as it cools. A quantum is a unit of energy radiated outward during the cooling process of particle matter. Temperature is a measure of the ability of particulate matter to radiate externally. "The Law of Cooling", the matter composed of elementary particles, every atom in it, builds a temperature field that is high inside and low outside, continuously radiates energy outward, cools itself, and makes its own state more stable. At the same time, it is constantly absorbing the energy transmitted from other nearby atomic substances. Every substance composed of elementary particles maintains a balance in this dynamic state of heat release and heat absorption. Heat release is active and heat absorption is passive. There is a substantial difference between "The Law of Cooling" and "The Theorem of Heat Exchange" learned in middle school. Heat exchange is understood from the molecular level. The law of cooling is the heat exchange explained from the quantum level. It is important to note here that active cooling is a basic property of matter. This feature was previously unrecognized. What is the temperature? We use a thermometer to measure the temperature, high and low, what exactly are we measuring? In air, is the velocity of the gas being measured? Obviously not, is the amplitude of the crystal oscillator measured in the solid? Is pressure measured in liquids? Obviously neither.

GJSFR-A Classification: DDC Code: 530



Strictly as per the compliance and regulations of:



Three Properties of Matter

Li Xuefeng

I. INTRODUCTION

Let me talk about three concepts first, which may not be very accurate but I haven't found a better description. Radiation is the process by which particulate matter radiates energy as it cools. A quantum is a unit of energy radiated outward during the cooling process of particle matter. Temperature is a measure of the ability of particulate matter to radiate externally. "The Law of Cooling", the matter composed of elementary particles, every atom in it, builds a temperature field that is high inside and low outside, continuously radiates energy outward, cools itself, and makes its own state more stable. At the same time, it is constantly absorbing the energy transmitted from other nearby atomic substances. Every substance composed of elementary particles maintains a balance in this dynamic state of heat release and heat absorption. Heat release is active and heat absorption is passive. There is a substantial difference between "The Law of Cooling" and

"The Theorem of Heat Exchange" learned in middle school. Heat exchange is understood from the molecular level. The law of cooling is the heat exchange explained from the quantum level. It is important to note here that active cooling is a basic property of matter. This feature was previously unrecognized. What is the temperature? We use a thermometer to measure the temperature, high and low, what exactly are we measuring? In air, is the velocity of the gas being measured? Obviously not, is the amplitude of the crystal oscillator measured in the solid? Is pressure measured in liquids? Obviously neither.

What is the temperature we measure indoors? It is still radiation, which is the determination of the radiant energy of indoor materials. In solids and liquids, the temperature we measure is still their radiative capacity. Therefore, temperature is a measure of the ability of particle matter to radiate to the outside. These are just personal knowledge, for reference only.



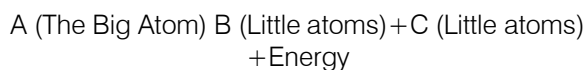
Author: e-mail: 1242604176@qq.com

a) *The essence of frictional heat generation*

When we were young, we often played the game of smashing sparks at night, that is, smashing the small stone in our hand on the big stone, you will find that if there is sliding, the spark will be very small, and the spark will be when it touches will be great. This is in great contradiction with the theory of frictional heat generation that we have learned. Is there any other explanation? The current popular explanation, the energy transformation of objects. If we must understand in this way, we will further consider how these energies are converted from kinetic energy to heat energy of molecular motion.

To talk about the essence of frictional heat generation, we must first talk about the essence of friction. The relative motion of two objects forms friction. From a macro perspective, the relative motion of two objects is the relative displacement of the two contact surfaces. From the perspective of microscopic particles, it is the relative displacement of the two particle clusters. The contact surface of the two particle clusters has obvious unevenness, and friction is the mutual collision of the convex parts of the contact surface. collision, we can infer that it is the pressure generated by the particles in the contact part. It can be considered that the essence of friction is: the pressure generated by the collision between the particles of the convex parts of the two relative motion contact surfaces. From the point of view of weak gas pressure, the molecular kinetic energy is increased, the molecular oscillation is intensified, and the radiation energy is increased. From the perspective of high-intensity pressure, just like the principle of proton collider, proton collision produces the same effect of splitting, resulting in great atomic splitting and releasing a lot of energy. Therefore, the heat generated by friction is generated by The strong pressure between the contact parts. When the pressure is strong, the particle structure can be broken and changed, resulting in breaking excitation, thereby releasing a large amount of energy.

Its formula uses iron as an example to illustrate:



From the calculation point of view, the frictional heat generation Q , is proportional to the contact surface pressure, P and speed V . It can be seen from this that pressure plays a decisive role in frictional heat generation.

The pressure formula for the collision of moving objects, $p = mv/st$. m is the mass, ΔV is the decrement in velocity, s is the contact area, and Δt is the action time. Substituting the data in can calculate the pressure at the touch. This formula extends to collisions between small particles and can be transformed into $p = mv^2 / 2\pi r^3$. V is the velocity and r is the particle radius.

Why, when there is a lot of stress, energy is generated? We know that there are a large number of high-speed moving electrons around each atomic nucleus. Although two relatively stationary objects are stationary when viewed as a whole, they still have high-speed electrons at the level of the atoms in the contact surface and relative motion. As long as the pressure is large enough to make the two particles come into close contact with each other, breaking the respective laws of motion of electrons around their nuclei, The particle structure will change, resulting in mass-energy conversion to release energy. This is the essence of frictional heat generation.

We know that there is a large space around the nucleus, and there is a magnetic field generated by the movement of electrons. When the pressure on the material is greater than the binding energy, the normal feeling is that the object begins to change in shape or diffuse and slide around. But what happens if there is no room for activity? Let us boldly imagine that matter begins to compress space. At first, it compresses the circulation space of magnetic field lines around the nucleus. The magnetic cycle of a single atom cannot be completed, and the large cycle of the magnetic field of matter is forcibly completed, and the magnetic energy is collectively released to the outside, forming external magnetism. In the past, matter had no magnetism, because individual particles had their own magnetic cycles and exhibited random magnetism to the outside world, so there was no magnetism. Under the action of pressure, the magnetism is concentrated and released in a concentrated direction, so it appears magnetic to the outside. This is the principle of the formation of magnetism, and the magnetism of geomagnetism and stars is formed in this way. This is my reasoned understanding of the formation of the Earth's magnetic field, and I hope you can refer to it.

Under the pressure of the magnetic cycle, the pressure continues to increase, and the electron circulation around the nucleus is blocked. In order to achieve the cycle, the atom releases a part of the energy ions to keep itself intact. Due to the release of heat energy, the object begins to heat up, and as the pressure continues to increase, the material slowly liquefies, then vaporizes, and finally completes ionization. Continuing, the ions begin to decompose. First, the large ions are decomposed into small ions, and the small ions continue to decompose into a soup composed of protons, neutrons, and quarks. Finally, the quantization is completely decomposed, and the energy generation process of a star is completed. The reaction of protons in the ion soup of proton quarks is the pattern in the proton collider. The ions collide with each other and break apart, forming smaller ions.

Triboelectricity is a phenomenon we all know, and the phenomenon of stone tip sparks shows that there is an ultra-high temperature energy release

process at the stone tip. The power of one person completes the spark of the stone tip, the power of the earth's plates, produces a volcanic eruption, and the power of the earth has geothermal heat. This is what I know about the source of the earth's heat.

b) The following is my understanding of the sun

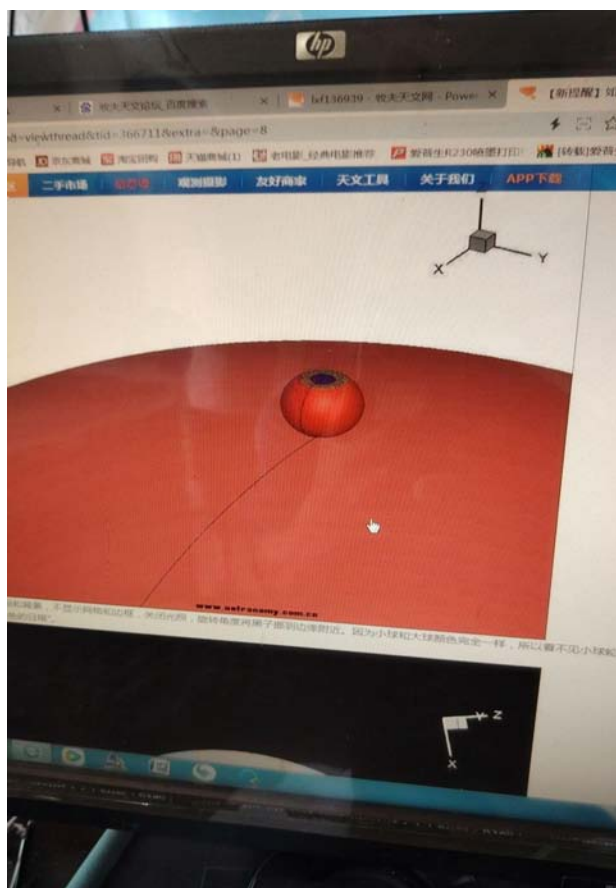
The sun is a liquid sun, which is substantially different from the gaseous sun recognized by the current mainstream of science. How stable is the gaseous sun, a series of problems such as the greater the mass, the lower the density. In particular, the understanding of the sunspot prominence flare is even more unclear and cannot be explained accurately.

The sun is a huge liquid metal hollow sphere, and its structure can be roughly divided into four layers: from the outside to the inside, respectively, the outer metal atmosphere layer, the liquid metal layer, the inner gas ion layer with metal large ions decreasing to small particle ions, The last formed quantum core area.

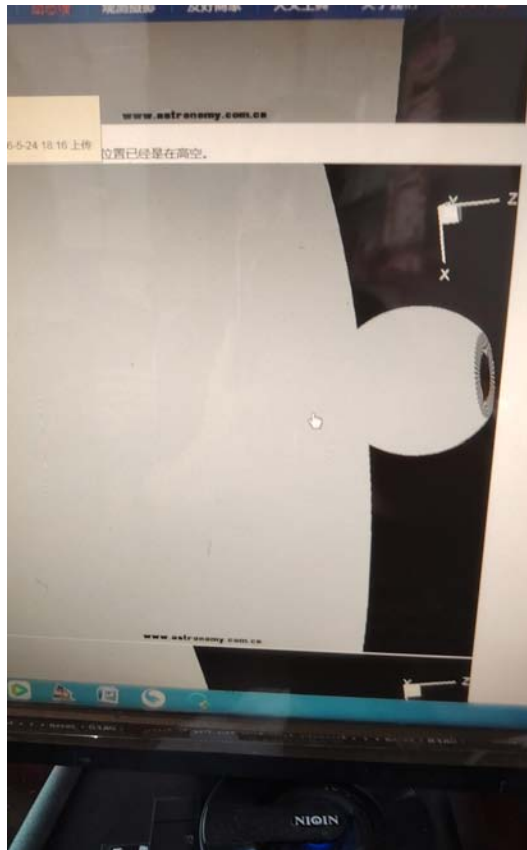
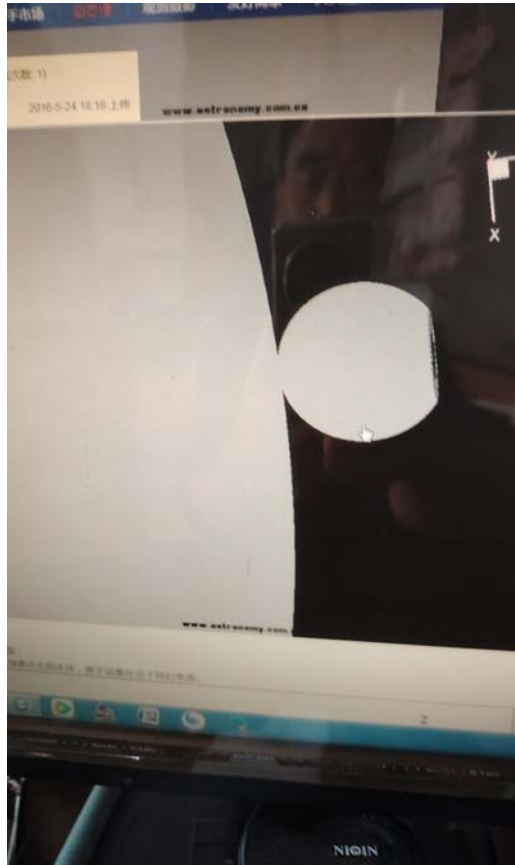
The extreme temperature and extreme pressure inside the star converts metal ions into light quanta to generate huge energy, which is the source of the huge energy of the sun. This huge energy heats and boils the metal on the surface of the sun, turns into metal gas and flies into space, forming the metal gas layer of the sun. This layer is what we usually think of as the burning surface of the sun. Thus forming the radiant feeling that people see. Most of the vaporized metal molecules liquefied and fell back to the sun after cooling in space, forming metal rain on the surface of the sun. Among them, the lighter metal molecules (such as sodium) gasify and cool down in the upper atmosphere for a long time to form solids. Because of its lower temperature, it is darker than its surroundings. The solid blocks are large, and they are seen on the earth. This is sunspots outbreak phenomenon. It forms like hailstones on Earth. When the sunspots fall back to the sun, they gather a large amount of other liquid or solid substances to form a larger volume, and when they fall, they splash huge waves to form solar prominences. The aroused liquid shallow place causes the overflow of internal ion hot, which can also form the eruption of solar flares. The prominence flare formed in this way is only accidental. Most of the prominence changes and flares are formed in this way. Solar prominences are formed by the cooling of the sun's atmospheric material in the air, just like the clouds on the earth. The darker black prominences are generally higher in height and relatively lower in temperature, and the shadows left on the surface of the sun are more obvious, but they will not Obviously, there are vague performances. As the height decreases, due to the heating of the prominence by solar radiation, a relatively high-temperature space is formed between the prominence and the sun's surface due to the greenhouse effect. As the temperature of the prominence increases, the color of the shadow will be

roughly consistent with the color of the sun's surface. At this time, there will be an inconspicuous appearance, but there will be an obvious prominence phenomenon at the edge, but it will not be obvious after turning into the sun, and it will feel difficult to be found. As time goes by, the height will further decrease, and the temperature of the prominence will further increase. As it rises, the color begins to shine and it becomes white spots. As the temperature continues to rise, the cloud begins to evaporate or sublime, and its volume expands rapidly, forming an evaporative flare explosion. Such a flare often has a large inner high pressure of the prominence, which produces a self-expansion, forming a huge flare. Such flares tend to push part of the prominence material directly out of the sun. Black shadow prominences generally do not fall back to the sun, only concentrated sunspot prominences will fall back to the sun, forming a splash-type flare explosion, if the sunspots are evaporated before falling back to the sun, it will form an evaporative flare explosion just like the black shadow prominence. There is a colorless stage between the white white spot and the black prominence, which gives people a wrong understanding, the shadow disappears automatically, the flare is produced instantaneously, and the place where there are sunspots is often the place where the prominence is concentrated, so the two are in the same place. The odds are high together, which is what I know about prominence sunspot flares.





These understandings are seen and summarized in the high-definition map of the sun. The pictures I collected on the Internet in 2021 show a spoon-like celestial system appearing in the space of the sun. Although the sunspot model described ten years ago does not have a handle, the body system is exactly the same. The photos show that the sunspots described by the mainstream theory are far from each other. So far, no one at home and abroad can explain this phenomenon clearly.



The Sun, almost perfectly explained all the mysteries of the sun. A solid, almost unquestionable sun. In the past, hydrogen polymerization was said to solve the problem of solar energy. It has been more than a hundred years since hydrogen polymerization released energy, and there has been no successful experiment so far. There are too many doubts in spectral analysis, and my cooling law can better explain the problem of radiation spectrum.

Frictional heat generation is a phenomenon we all know. The phenomenon of sparks at the tip of the stone indicates that there is an ultra-high temperature energy release process at the tip of the stone. The power of a person completes the spark of the tip of the stone; the power of the earth's plate produces a volcanic eruption; the power of the earth has geothermal heat. The power of Jupiter has Dahongban; the power of the sun has radiance. From the perspective of natural phenomena, we make such inferences. However, whether our reasoning is correct or not can only be determined through the verification of pressure experiments, and the change state of matter under pressure is the root of unlocking the essence of frictional heat generation. (Note: In my planetary model, there is no gaseous planet, the sun is liquid, and Jupiter is a semi-liquid planet, which is the period when the earth collapsed. The description of the geomagnetic field here is definitely the current world, and the geomagnetic phenomenon, strongest explanation).

c) *Three properties of matter*

In my opinion, matter composed of elementary particles has three major properties:

1. Thermal radiation of the substance;
2. Cold polymerization of substances;
3. The thermal composition of matter.

Since my understanding of the properties of matter originated from the thinking of the sun and the universe, when explaining these issues, it is connected with the evolution of galaxies.

1. *Thermal radiation of matter*

Under extremely high pressure and temperature conditions, matter changes matter from atoms into ion matter, and then into a basic ion soup composed of protons, neutrons, etc., and then these ions collide with each other and annihilate each other in a high-energy state, becoming quantum beyond the speed of light is emitted into space, and this process happens inside the stars, and the sun is the closest one to us. It is in this form that stars eject matter. (Ions collide with each other in a high-energy state and annihilate into quanta, which has been proved in the European proton collision experiment.) No matter can exist in the ion state at the star's constant center. Can ions be completely quantized inside the star? Is the standard to measure whether a star can be established.

2. *Cold polymerization of substances*

The interior of the star annihilates matter, and starts its parabolic cosmic journey at the speed of light, and finally gathers in the extremely cold place on the edge of the galaxy to form a molecular cloud that revolves around the galaxy. Due to the rotation of the galaxy, the propagation of these light-speed matter The distance is greatly increased, and finally most of these substances cannot escape from the stars and galaxies vertically, and finally form molecular clouds at the edge of the galaxies, that is to say, the space with the galaxies as the reincarnation unit shrinks due to the rotation. These molecular clouds formed giant molecular clouds after cooling in the later stages of the galaxy. Matter is cooled in the low-temperature state at the edge of the galaxy, and the quantum is re-gathered, combined, and under the cooperation of pressure. The process of recombining into elementary particles and massive atoms is the cold polymerization of matter, and this process is also the reverse process of matter annihilation.

3. *Temperature composition of matter*

It is based on the current temperature of the earth, modern scientific research, and the various physical and chemical changes that occur between atoms and molecules that are composed of elementary particles used by people in production and life. All are temperature combination properties of matter. For example: C burns to generate CO₂, and then cools into dry ice; C, H, O form inorganic state, organic state, plants, animals, etc. are warm combinations of substances. Like iron changing from solid to liquid, and then into particle gas, it is also a combination of temperature. Until the process of becoming ion soup of protons and neutrons under high temperature and high pressure and annihilation to become quantum later, it is the heat dissipation of matter. The decay of massive atoms is also the thermal radiation of matter.

The three major properties of matter, the physical and chemical changes in modern people's understanding, research, and use of life, are only its warm composition, and its radiation radiation has been contacted, but not understood; the cold polymerization of matter, people There is neither contact nor awareness, and it happens in the black hole region where people have mysterious awareness. Some people have studied the cold polymerization of substances in the past, but there has been no progress so far. I think that the first is that the conditions are limited—the coldness is too small; the second is that the characteristics of cold polymerization and warm combination of substances have not been distinguished. What is said here is the key point of cold aggregation.

The main breakthrough of my thinking is to complete the imagination of the critical stage of the

theory of cold aggregation, and to realize that matter is a complete cosmic cycle from radiation to aggregation. Since the starting point of my thinking is the cold aggregation of matter, it is the same as the hot aggregation of the current science. Mainstream has a substantial difference. As a result, there are great differences in views on things in the universe. For example, I think the cloud-shrouded Large Magellan system is a galaxy that is going out, while the clear Small Magellan system is a galaxy that has just been born.