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Our Radiant Sun is Condensed and Cold

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Abstract
Some years ago I proved that the Sun behaves as one large hydrogen atom. This gives us a new unique explanation of the nature of the Sun because it means – according to Bose-Einstein's condensation theory - that the Sun must be at the highest degree of condensation and coldness. Because we proved also that the radius of the Sun is proportional to that of hydrogen atom, therefore the radii of hydrogen atoms in the Sun's core must be at their shortest value forming the recently discovered small neutron star in that core , while at the outermost layer of the Sun called corona like that at the outermost level of energy in hydrogen atom (beyond fifth level) every electron here and there is free from the attraction of the proton, and the daylight on the Earth takes place when the free energetic electrons of solar corona interact with the gaseous atmosphere of the Earth causing its atoms to glow when the Earth faces the Sun through its motion around its axis, and because the coronal electrons near the Sun have less free energies due to strong solar attraction measuring to those at farther distance from the Sun therefore we can understand why the Earth on its orbit is hottest when it is farthest from the Sun not when it is closes.
Keywords: hydrogen star, hydrogen atom, Bose-Einstein theory, condensation state , Sun's layers , neutron star.

Introduction

Although we appreciate all the efforts spent for understanding the nature of the Sun, the Sun though formed from hydrogen atoms like any other substance in the Universe is not merely a hydrogen ball , it is a very rigid and cold as its huge number of hydrogen atoms behaves as only one hydrogen atom. On the other hand the Sun's energy has nothing to do with any nuclear source, being the thermonuclear reaction at its core (hydrogen transferring into helium according to Edington's theory) or from neutrons supposedly repelled from its neutron star core according to Manuel's theory, simply because the Sun's light at the top of Earth's atmosphere is composed by total energy of about 50% infrared light , 40% visible light , and 10% ultraviolet light. None of these kinds of radiation is nuclear or could have been turned out of nuclear radiation.

1- Bose-Einstein's theory

According to Bose–Einstein theory, Cornell and Ketterle's groups observed experimentally a state of matter unlike any other, as mentioned in Nobel Prize's statement[(1)], they found that a great collection of atoms reaching their highest possible degree of coldness and density behave as a giant one atom with each atom in the collection losing its individual property. This is the main point in Bose - Einstein theory announced in 1924 and had its verification after decades since 1995.

2- The Sun behaves as one hydrogen atom

One night some years ago, I found that any object supposed to orbit the Sun at its surface, let it be denoted by S, will move with the same orbital velocity of an electron revolving the proton at the fifth level of energy before the electron in hydrogen atom is free from the attraction of the proton, and also before the electrons are free from protons in the layer above the surface of the Sun which is the outermost one Called corona as follows:
The orbital velocity of the supposed object S at the surface of the Sun is

$$V^2 = \frac{GM_S}{R} = 1.90 \times 10^{11} \qquad [1]$$

Where R its radius of the Sun in meters.
But this exactly is the orbital velocity of the electron in the fifth level of energy in hydrogen atom just before the electron is free, where

$$\frac{13.6\ ev}{5^2} = 0.544\ ev = 8.714 \times 10^{-20}\ J = \frac{1}{2} m_e v^2$$

$$m_e v^2 = 1.74 \times 10^{-19}\ \text{J}$$

$$v^2 = \frac{1.74 \times 10^{-19}\ J}{9.11 \times 10^{-31} Kg} = 1.90 \times 10^{11} \qquad [2]$$

I was surprised, when I discovered this fantastic equivalence between eqn 1 and eqn 2[(2)], where the chromosphere is the actual surface of the Sun as it is the lowest level of the solar atmosphere, it appears as a thin red rim of light. The red color here confirms that the electrons in the chromosphere are at the fifth and last level

of energy in hydrogen atoms before these electrons are getting free from the attraction of protons in the above corona layer (after being ionized in the ionosphere). The electrons of cromosphere emit the longest wavelength in all the portions of hydrogen spectrum $(656.3\ nm)$

Therefore, the Sun with all hydrogen atoms forming it behaves as only one hydrogen atom as the solar planets from Mercury to Pluto obey the same law of motion around the Sun ($V^2 = \frac{GM_S}{R}$) and accordingly move with velocities less than that of the mentioned supposed planet S. Thus the solar planets are an extension of our supposed planet, and this means that the Sun according to Bose-Einstein's mentioned theory is very condensed and cold!

More fantastically, is that the orbital velocity of any solar planet at its distance from the center of the Sun including S, has the value $V^2R = 1.32 \times 10^{20}$, and this value is determined by the two equal and opposite charges $e^- + e^+ = 2e$ in every hydrogen atom forming the Sun. As $N = 1.91 \times 10^{57}$ is the number of its hydrogen atoms, then

$$V^2R = N(2e)^2 \quad (3)$$ [3]

Therefore it is clear that while the small neutral charge in one hydrogen atom $(e^- + e^+)$ causes the electron to revolve the proton, the large neutral charge of the large hydrogen atom of the Sun causes any solar planet to revolve it and this means that the two equal and opposite halves of the circular motion as a geometrical fact is nothing here but the two equal and opposite halves of the neutral charge in the small and large our hydrogen atom, and what we call gravity is nothing but the neutral charge. Moreover we will prove now there is a definite ratio between the radius of the small and large hydrogen atom giving us the key to understand the successive layers of the Sun.

This again confirms that the Sun behaves as a large hydrogen atom and it must be at the highest degree of condensation and coldness. In fact the Sun's coldness begins early at the nearest point on the Earth's orbit inside the corona as the outermost layer of the Sun because when the Earth on its orbit is at the nearest point from the Sun (147.1 million kilometer) the winter is at its top in the 4th of January. While in 4th of July when the Earth is at its farthest point at 152.1 million Km summer is at its top.

3- The ratio between the two radii of hydrogen atom and the Sun

According to the mentioned equivalence between the two orbital velocities of the electron in hydrogen atom and the supposed planet S of the Sun (eqn 1 and eqn 2) the equivalence between gravity and electromagnetism takes the following form:

$$\frac{GM_S}{R} = \frac{e^2}{4\pi r m_e \varepsilon_0} \quad (4)$$

This corrects the idea that the force of gravity is effectively zero in the presence of the electric force, where the two forces appear as two faces of one coin! And accordingly the ratio between the radius of hydrogen atom and that of the Sun is as follows:

$$\frac{r}{R} = 1.91 \times 10^{-18} \quad (5)$$ [4]

Where we can determine one from the other. The successive layers of the Sun are in harmony with the successive levels of energy in hydrogen atom. Now, according to this relation the radius of every hydrogen atom in the center of the Sun must be at its shortest value , this is verified by the mentioned small neutron star discovered recently by Oliver Manuel in the core of the Sun(6) where the radius of hydrogen atom in this core is that of nuclear level $(1.2 - 1.4 \times 10^{-15} m.)$ or less, and this proves on one hand that the neutron is really a condensed hydrogen atom, on other hand that the mass of the Sun seems to be concentrated in its center, that is if we want to calculate the "gravitational" force from a large extended object like the Sun on another mass at a location outside it , the Sun's gravity acts as if it were coming from an infinitesimally small object in the center of the Sun but with the same total mass of it(7). Also eqn 4 confirms Oliver Manuel and the Iron Sun advocates who suggested that the Sun was formed by accretion of heavy elements, chiefly iron.

From the core to the hydrogen surface of the Sun - using eqn 4- the radius of hydrogen atom is $1.33 \times 10^{-9} m$ before the electrons are free from the attraction of protons in the above layer, the corona , and between the center and the surface of the Sun the chance is opened to various substances because simply hydrogen atom is the corner stone in every substance in the universe and the door here is widely opened for Manuel suggestion of the" iron Sun "

4-Sun's radiation

The previous discussion about the condensation and coldness of the Sun leads naturally to the question about its radiation, and the seasons on the Earth, although we referred to the answer let us give it here in some detail.

Above the hydrogen surface of the Sun, comes the corona layer where the electrons are free from the protons in the plasma state. Here the attraction of the Sun still holds and governs these free particles where the daylight and seasons can be understood as follows.

-Daylight:

When the Earth faces the Sun during its revolution around its axis the free energetic coronal electrons hit the gaseous atmosphere of the Earth forming mostly of nitrogen and oxygen causing their atoms to glow[8] because simply any atomic electron hit by another electron changes its velocity and wavelength keeping its original frequency in the atom as follows

$$\frac{v}{\lambda} = \frac{c}{\lambda'} \quad (8)$$

Where c , the speed of light , is that of electron itself as the real unit of light (not the so called photon) In fact, this equation can be proved through Franck – Hertz experiment showing that c is the velocity of the electron changed from its original velocity v in the atom and the change in the wavelength was to keep the original frequency and accordingly the energy of the atomic electron.

-Seasons :

The coronal particles are still governed by the attraction of the Sun, naturally at nearest point to the Sun the velocities of electrons are affected by stronger attraction causing their velocities to be less than those at farthest point from the Sun., Therefore at 147.1 million Km from the Sun the Earth is at its nearest point to it on its orbit where the top of winter takes place in 4th of January, while at 152.1 million Km [9] from the Sun the Earth is at its farthest point from the Sun and summer is at its top in 4th July and this explains why the Earth is hottest on its orbit when it is farthest from the Sun not when it is closest.[10]

Conclusion

1- The Sun as a hydrogen star behaving as one hydrogen atom must be at the highest degree of coldness and condensation according to Bose- Einstein condensate (BEC).
2- The radius of every hydrogen atom forming the Sun is proportional to that of the Sun explaining the successive layers of the Sun including the core with its very condensed hydrogen atoms or neutrons forming small neutron star. At the last layer called the corona the free energetic electrons cause the daylight, while the Earth being at the nearest or farthest points on its orbit explain the seasons as the nearest electrons have lower velocities creating winter while farthest ones with greater velocities create summer.

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