

NOT ONLY THE SUN REMAINS A MYSTERY UNDER CURRENT PHYSICS, BUT ALSO THE ATOM AND ITS PARTS

There is only one physical truth that must be considered as an infinitely important one. This physical truth cannot be other than the building blocks of matter. It is absolutely impossible to understand the physical reality of any physical entity, without comprehending the true building blocks of matter. You can come up with as many theoretical physical models as you wish, and surely you would obtain from those theoretical models some approximate physical properties of many physical entities. However, obtaining the absolute facts of any physical entity is absolutely impossible, without understanding the true building blocks of matter that make up the Universe. Moreover, and more importantly, when the real building blocks of matter will be understood, it will become abundantly obvious that all known forces in nature, including gravity, are manifestations of the same force.

However, if you are curious why, I believe that the sun is still a mystery under current physics. Then, please read some of my published papers, or at least some of the posts that I wrote on different online journals, educational and professional websites. By reading, just a small part of the large material that I published, you will see that all the observed features of the sun are in contradiction with the fundamental notions of the current theory. In fact, the failure to replicate the energy production of the Sun, is only one of the most obvious and practical evidence against the current dogma. I have stated repeatedly, that I will stop arguing against the current model, if any fusion research institute anywhere in the world can produce one break even reaction based on the process of the so-called control thermonuclear fusion, which is supposed to take place at the core of the Sun. On the other hand, if my proposed model does not generate energy gain far

higher than nuclear fission reaction and even higher than the hypothetical thermonuclear reaction, then I will raise the white flag and consider my proposed model to be completely wrong. My scientific belief about the Sun cannot be altered, even if 7 trillion solar scientists will stand-up against me, defending the current model. Why? First of all, in any rational debate, I can purify the minds of top mainstream solar physicists from all theoretical contaminations. I can show them the naked truth which explains all the basic features of the Sun, including all solar phenomena that are currently considered mysteries. Secondly, I can always challenge them to produce one break even reaction based on their thermonuclear fusion model. They can never achieve such break even reaction, no matter how high is the temperature that can be achieved with any thermonuclear device. ***The physical process responsible for the radiated energy of the Sun is the process of condensed matter nuclear reaction. It can easily be shown with a lab-scale device. In other words, I can provide all the theoretical and technical details including the engineering design approach (a design methodology) of a Lab scale reactor that will demonstrate with clear experimental values, the process of condensed matter nuclear reaction that takes place in the Sun. Thus, sooner rather than later, astronomy will be rescued, the Big Bang Universe will vanish and humanity will achieve unlimited progress and prosperity.***

Nonetheless, it is not only the most important physical entity within the solar system is still a mystery, but also, the physical entity that makes up all the chemical elements of the Universe. It might come as total surprise, if I say to you, that the basic facts about the atom and its particles are not understood as well. The reason is exactly the same, why the Sun and its planets are misunderstood. In other words, the fundamental reason is the misunderstanding of gravity which depends on knowing the real building blocks of matter. This lack of understanding is more obvious on the atomic and subatomic scales, than on other physical scales. Thus, it is obvious that the root cause and the fundamental reason that prevent, knowing the deep truth of the Universe, is the misunderstanding of gravity and its role. But, gravity can never be understood, without knowing the real building blocks of matter. On the other hand, when the real building blocks of matter will be comprehended, the physical meaning of gravity, its cause and role in the distribution of matter will be revealed. Besides that, quantum mechanics will be removed from the domain of physics, and it will become clear that all physical

events in the Universe are deterministic not probabilistic. Consequently, our current physics era that started in the beginning of the last century will be called the era of dark and black physics myths.

However, the evidences that the atom and its parts are still mysteries can be seen in many recent observations. For instance, in the end of the last decade, experimental physicists observed something about the basic feature of the proton that was totally unexpected and also considered impossible according to the current standard model of particle physics. Namely, the so-called proton radius puzzle. Historically the proton radius was widely accepted to be 0.8768 femtometres ($1 \text{ fm} = 10^{-15} \text{ m}$). This value was challenged by a 2010 experiment utilizing an accurate method, which produced a radius about 5% smaller than the previous value. Basically, mainstream science is at a loss to explain, why the proton radius is slightly larger when it is orbited by an electron than when it is orbited by a muon, a sibling of the electron that's 207 times as heavy but otherwise identical. Keep in mind that, according to the reigning theory of particle physics, the proton should interact with the muon and the electron in exactly the same way. The discrepancy is not only remaining unresolved, but also has deepened with new finding. **The deuteron is too small as well** *"The radius of the proton has remained a point of debate ever since the spectroscopy of muonic hydrogen indicated a large discrepancy from the previously accepted value. Pohl et al. add an important clue for solving this so-called proton radius puzzle. They determined the charge radius of the deuteron, a nucleus consisting of a proton and a neutron, from the transition frequencies in muonic deuterium. Mirroring the proton radius puzzle, the radius of the deuteron was several standard deviations smaller than the value inferred from previous spectroscopic measurements of electronic deuterium. This independent discrepancy points to experimental or theoretical error or even to physics beyond the standard model".* <https://science.sciencemag.org/content/353/6300/669>

Hundreds of papers have been written about the proton radius puzzle speculating about the cause. The majority of those papers have pointed out that the shrinking of the proton in the presence of a muon would most likely signify the existence of a previously unknown fundamental force, a one that acts between protons and muons, but not between protons and electrons. First of all, I would like to know, why scientists consider the shrinking of the proton radius as a puzzle, but the shrinking of the atomic radius-as the number of particles (electrons and protons)

increases-is not a puzzle? It is a well known observed fact that atoms get smaller moving left to right on a periodic table. However, in order to, understand the reason for the shrinking of the proton radius, the only fundamental force that must be realized is the one, which permanently exists in the building blocks of matter. When that would be realized, not only the so-called proton radius puzzle, the proton spin crisis, the long-standing discrepancy in the measurement of muon's anomalous magnetic moment and the cause of the shrinking of the atomic radii would be known but also, any physical phenomenon on any scale would be explained in consistent manner and without contradicting the explanations of any other observation or physics fact. Finally, it is worth mentioning that the phenomenon of the tides is actually caused by the same physical process that makes the proton radius smaller, in the presence of the muon and larger in the presence of the electron.

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