

## SHRAIRFUSION MODEL IS THE ABSOLUTE EMPIRICAL EVIDENCE OF THE PHYSICAL REALITY OF THE SUN

*Physics is the king of all sciences as it helps us understand the way nature works. Unfortunately, the fantasy of pure mathematics started to take over physics in the beginning of the last century. At the same time, the laws of thermodynamics and magnetism, started to be violated on large scales. Now, mathematical fantasy is the name of the game and mainstream physicists have become obsessed with abstract notions that have no relation to physical reality. In spite of that, physicists of the advanced nations think that they know so much about the Universe, including how it was created and how it works. Nothing can be further from the truth, if just the basic facts about our own star were realized, we would be flying right now, among the stars of our galaxy. However, make no doubt about it, the current theories of standard astrophysics and cosmology will be defended to the last dollar, and no intellectual revolution, will be successful, against the physics establishment using theoretical arguments or even large number of observational evidence. The only thing, nevertheless, that can deliver a fatal blow to the empire of physics fantasies, is the revelation of the biggest empirical truth about the sun. In other words, disclosing the real standard solar model and experimentally verifying it is the only thing that can rescue, the king of all sciences. This is exactly, what SHRAIRFUSION Model is intended to do.*

### ***The Major Errors of Kirchhoff-Planck and their devastating impacts on the Development of Physics:***

Scientific progress does not move on a straight line, as many people think. But, it takes twists and turns along the way to new revolutionary ideas. Our society which does not tolerate mistakes has a wrong perception of well-known scientists. Those scientists have some sort of an image that everything they said is correct. In fact, throughout history, the greatest scientific achievements came as a result of correcting or rather revealing the mistakes of well-known scientists. Highly intelligent scientists are also human, and they make errors like all peoples. However, when those scientists make errors, usually their errors are not small ones and their impacts on scientific progress are far reaching and last for a very long time. We have ideal examples that proof this argument. Gustav Kirchhoff and Max Planck are well known scientists who had contributed enormously to physical science. Kirchhoff was the father of spectroscopy (spectral analysis) and the science of fundamental electrical circuits. His circuit laws are widely used in electrical engineering today. On the other hand, Max Planck is credited for being the founder of quantum mechanics, since he introduced the concept of a hypothetical energy quantum to explain blackbody radiation spectra. But, I have my reservation about his entire scientific accomplishments. In the ultimate analysis, quantum mechanics is not physics and in fact, it has the lion's share in the confusion of physical reality. If the presence and role of magnetic fields on the atomic and subatomic scales were realized, then quantum mechanics would have never entered the domain of physics in the first place, but would remain as probabilistic mathematical theory. Nevertheless, Kirchhoff made a massive mistake with regards to his law of thermal emission. This error had far reaching implications and devastating consequences on different branches of physics, including the basic misconceptions that led to the formulation of quantum mechanics and the current model of the

sun. Modern physics is considering Kirchhoff's law of thermal emission (blackbody radiation) as universal, although, in physical reality, this consideration is definitely not true, as clearly explained by Pierre-Marie Robitaille from Ohio State University. In fact, even proper mathematical proof of Kirchhoff's law does not exist. The law is stating that within a cavity the ratio of emissive and absorptive power is independent of the nature of the cavity walls. Kirchhoff wrote the following, in his paper that was published in the journal, Poggendorfs Annalen der Physik und Chemie, 1860, v. 109, 275-301. Phil. Mag., ser. 4, 20, 1-21. "If a space be entirely surrounded by bodies of the same temperature, so that no rays can penetrate through them, every pencil in the interior of the space must be so constituted, in regard to its quality and intensity, as if it had proceeded from a perfectly black body of the same temperature, and must therefore be independent of the form and nature of the bodies, being determined by temperature alone...In the interior therefore of an opaque red-hot body of any temperature, the illumination is always the same, whatever be the constitution of the body in other respects" One wonders, if the above quotation is true, then why are all laboratory blackbody cavities, always constructed from nearly ideal absorbing materials? With absolute certainty, Kirchhoff's Law of thermal emission is not valid and arbitrary cavities do not contain black radiation. The emissive properties of all cavities are directly dependent on the nature of the materials involved. The proper law of thermal emission comes from Balfour Stewart. Stewart's law is much simpler and it does not say that all cavities contain black radiation. It says at thermal equilibrium the emissivity of an object will be equal to its absorptivity. Nonetheless, the crucial error of Kirchhoff propagated deeper into physics after Max Planck insisted that Kirchhoff's Law was valid. Planck unknowingly violated the laws of thermodynamics when he tried to prove that Kirchhoff's law was correct. Planck said, "According to Kirchhoff law, this radiant energy is independent of the nature of radiating substance and therefore has a universal significance" Planck added. "It is therefore possible to change a perfectly arbitrary radiation, which exists at the start in an evacuated cavity with perfectly reflecting walls under consideration, by the introduction of minute particle of carbon". Max Planck (1914). Theory of Heat Radiation, Planck made a serious error when he assigned to graphite the role of a catalyst, where in reality the graphite was a perfect absorber. Kirchhoff-Planck had never left the perfectly absorbing cavity. They should have considered the case with the perfect reflector as a valid separate case. In the final analysis, however, a black body is a perfect absorber and perfect absorber is always a perfect radiator. It absorbs all radiations and emits all radiations. This is obvious from the fact, that a black body emits all frequencies of electromagnetic waves. Thus, each material must be characterized by its own constants or variables. Nevertheless, those crucial errors resulted in Planck, believing that his equation could be universally applied, and his derived constants (Planck time, Planck length, Planck mass, and Planck temperature) are valid. Those constants are not valid and Planckian radiation is absolutely dependent on the nature of the radiating object. To phrase it another way, there is no universality in cavity radiation and as such, the constants of Boltzmann and Planck are not universal in nature and that has consequences throughout Physics. So, if, Kirchhoff's Law is not universal that means you can never have gaseous Sun, because gaseous Sun uses the equations of radiative transfer and those equations all have at their source Kirchhoff's Law of thermal emission.

***The Violation of the Laws of Thermodynamics and the Unphysical Notion of Gravitational Thermodynamics:*** Magnetism and laws of thermodynamics are the two fundamental disciplines that

make physical science a real science. If the principles of these two disciplines are ignored, one cannot claim of doing a real science. In spite of that, current mainstream theoretical physics does not respect the empirical laws of these two fundamental disciplines. For instance, the rules of extensive and intensive properties in the equations that supposed to describe the astrophysical processes and interactions are not followed. Current astrophysics is violating the basic rule that temperature must always be an intensive property and entropy is an extensive property. In fact, almost all the equations in current astrophysics are violating the principles of intensive and extensive properties. Thus, from a physics point of view, most theories in astrophysics and Cosmology are invalid. Gravitational thermodynamics was invented once astronomers came to understand that their equations violate the rules of classical thermodynamics relative to intensive and extensive properties. It is all started when J. H. Lane in the late 19th century used the ideal gas law to estimate the internal temperature of the Sun. Lane J. H. "On the theoretical temperature of the Sun, under the hypothesis of a gaseous mass maintaining its volume by its internal heat, and depending on the laws of gases as known to terrestrial experiment." American Journal of Science and Arts, 1820, July 1870 v.50 (148), 57-74 According to Lane's analysis as a gaseous mass collapses on itself its temperature will rise, this is known as Lane's Law. However, this notion is directly violating the first law of thermodynamics. Thermodynamic clearly stating that stars cannot be self-gravitating masses. As the system cannot do work on itself and increase its own temperature, but according to Lane and other theoretical physicists this is exactly what is supposed to happen. The system is essentially under goes self-compression, the temperature increases with decreasing radius. Furthermore, the fundamental equation that was introduced by Eddington, Jeans and Chandrasekhar also constitute a violation of thermodynamic principles. According to zeroth and the second laws of thermodynamics, temperature must always be intensive, but in this fundamental equation mentioned above the temperature is governed by mass which is extensive property and by radius which is neither extensive nor intensive property, the other terms of the equation are all represent constants. Thus, it is very obvious that this fundamental equation is invalid from a physics point of view and should have been rejected decades ago. The temperature of the system must always be intensive, because to state otherwise invalidate the use of all physics and laboratory evidence that must be applied in astrophysics. Moreover, it is infinitely important to recognize that the potential energy within a thermodynamic system can play no role in determining its temperature. In fact, this is at the heart of the problem and the reason why gravitational thermodynamics should have no place in physics. The invention of gravitational thermodynamics moved astrophysics and Cosmology outside the domain of real science. Therefore, the standard solar model is in violation of the most elementary physics principles. It is directly contradicting all the laws of thermodynamics. So, how can it be considered as a real physical model? Thermodynamic laws exist and they must be honored. But, in physics today scientists think that any object can be created from mathematic and this object must work according to its mathematical rules. Nothing can be further from the truth, any theory that violates the principles of thermodynamics is absolutely wrong, no matter what, even if it is mathematically correct. In fact, the erroneous belief that any physical entity can be created by mathematical modeling and the dishonoring of the principles of thermodynamics are the most fundamental reasons for the wide spread pseudo-scientific theories that dominant not only astrophysics and cosmology but also subatomic physics.

***Is the Sun a Ball of Gas and without a Real Surface?*** According to the standard model, the sun does not have a real surface, since it is considered as a fully compressible ball of ideal gas. This view is still accepted, although, modern space devices have provided different data that do not support the view that the Sun is a big ball of gas. If one looks to all the frequencies in Helioseismology from the lowest frequency up to gamma rays there is no question that the Sun has a real surface. Also, Helioseismology data clearly show that the core of the Sun undergoes solid body rotation. More importantly, the existence of the tachocline layer is in itself, sufficient evidence that directly contradicts the idea that the Sun is entirely a ball of gas. Furthermore, a few years ago, it was discovered that the area surrounding the tachocline varies its rotation in a regular pattern. Solar physicists are at a loss to explain this phenomenon, which occurs in regular 12-to-16-month cycles. By the way, this phenomenon is the key to understand how the sun's enormous magnetic fields are generated, and why they reverse polarity from positive to negative every 11 years. It is well known of course, that under the current theory, everything related to the sun's magnetic fields is still a total mystery and that is not surprising. Anyhow, the role of the tachocline layer and the reason why the layers above it and below it, speeding up and slowing down at opposite rates will be fully explained when SHRAIRFUSION model will be experimentally tested and published. For the time being, let us go further and examine the gaseous model of the Sun. First of all, what prevents the sun from collapsing on itself? And secondly, how can a gaseous Sun maintain stable radius, taking into consideration that a gas always expands to fill the void as the law of thermodynamics asserts and also, as we can observe in the lab? Astrophysicists solved the stability problem with the hypothetical concept of hydrostatic equilibrium. It is supposed to be a balance between gravity, gas pressure and radiation pressure. But again, if the Sun has no real surface how can gas pressure be generated in the first place? Homer Lane ignored this simple fact and theoretical physicists who came after him, used imaginary surfaces to solve this problem. Certainly, those imaginary surfaces are not the solution. The arguments of an imaginary surface, by Donald D. Clayton (Principles of Stellar Evolution and Nucleosynthesis), is not reasonable and cannot possibly be true. Particles within a gaseous Sun can never act as real surfaces. This fact is clear from so many observations and from the basic facts of experimental physics. Besides that, no experiment showed and no one can be made that can show particles within purely gaseous entity would act like real surfaces. Therefore, Clayton's imaginary surface has nothing to do with physical reality, and cannot be used to justify the generation of gas pressure in the Sun. It is physically impossible to generate net gas pressure inside a gaseous Sun. No surface, no pressure. Consequently, astronomers cannot justify the presence of electronic gas pressure as a component of hydrostatic equilibrium within the Sun. Nonetheless, the biggest problem with the hypothetical concept of hydrostatic equilibrium is the one that invoke the radiation pressure. This is a wrong assumption to start with, because physical objects strive for internal thermal equilibrium using conduction and convection not radiation. Radiative Processes are reserved for reaching equilibrium with the outside world. So, considering all the factors we have discussed, it's abundantly clear, that the standard model contains another two basic flaws. Firstly, gas pressure cannot exist in the absence of a real surface and secondly, objects (at least on earth) do not use radiative processes in order to achieve internal thermal equilibrium. So, we can confidently conclude that the Sun has a real surface not just an optical illusion one.

***The Standard Solar Model Cannot Explain the Solar Spectrum:*** In spite of the fact, that the law of thermal emission is one of the main reasons that contributed to the misunderstanding of our star, Kirchhoff's conclusion about the cause for the presence of Fraunhofer lines, is brilliant and totally accurate. In 1862, he said the following. "In order to explain the occurrence of the dark lines in the solar spectrum, we must assume that the solar atmosphere encloses a luminous nucleus, producing a continuous spectrum, the brightness of which exceeds a certain limit. The most probable supposition which can be made respecting the Sun's constitution is that it consists of a solid or liquid nucleus, heated to a certain temperature of the brightest whiteness, surrounded by an atmosphere at a somewhat lower temperature." Gustav Kirchhoff, 1862. Kirchhoff understood and he was correct in this case, that condensed matter is needed in order to produce the solar spectrum. Without a doubt the presence of Fraunhofer lines, constitute one of the most obvious evidence that the sun is made of condensed matter. However, it is important to add that the current model does not also provide true explanation for an important spectral feature in the solar spectrum. Why the hydrogen lines on the Sun are extremely broad? Besides that, the explanation regarding the intensities of those hydrogen lines that use quantum mechanics assumptions are not correct. Thus, the concepts which institutional solar physicists rely on, to explain the solar spectrum are deeply flawed and cannot be considered as real scientific explanations. The fact that theoreticians have wasted hundreds of millions of dollars on a hypothetical model that has nothing to do with the physical reality of the Sun is an embarrassment. To start with, Kirchhoff's law of thermal radiation cannot be used on the Sun. The law requires opaque cavity to produce blackbody radiation. The hypothetical model—the imaginary onion layers- that supposed to resemble the Sun cannot be compared to opaque cavity, even if we assume it is a reasonable model. In fact, Planck himself made that clear. He said in 1914 in the Theory of Heat Radiation "And hence it follows, that only material particles, not geometrical volumes or surfaces, can emit heat rays". Besides that, Kirchhoff's law is only valid in thermal equilibrium. Solar physicists assume of course, that the sun is enclosed and in thermal equilibrium. But, this assumption is totally wrong and one of the biggest contradictions. It is overwhelmingly obvious that the Sun is emitting lots of light at the level of the photosphere. In addition to the above, it is not proper to involve Stefan's law since all objects are known not to radiate internally. Definitely, thermal conduction is the preferable physical process that takes place inside the core, and the energy is dissipated through vibrations into the body of the Sun. In this regard, it is worth mentioning that all solar physicists acknowledge that vibrational energy does indeed exist inside the Sun. And the use of Helioseismology is the material evidence for its existence. On the other hand, the presence of internal convection currents violates the assumption of stable onions layers, because, thermal equilibrium can never exist in the present of convection. Yet, thermal equilibrium is required to apply Stefan's law. Therefore, it is improper for solar physicists to argue that Stefan's law can be used to justify the current model of the Sun. Thus, we can see that simple analyses easily reveal that solar physicists have no means of accounting for the solar spectrum based on the current model.

***Observed Facts Related to the Chromosphere Contradict Existing Models:*** In the solar standard model it is argued that Chromosphere emission lines are produced by random events linked to temperature. Yet, there are direct evidences that Chromosphere emission lines are not randomly produced and the most striking proof comes from considering the emission lines of Helium. Helium is not photo-ionized by light

emitted in the Corona, because if this is indeed the reason, then the rest of the atoms in the Chromosphere should also be ionized? Why only Helium? And why only triplet lines are produced? Nothing is random and the Chromosphere emission lines are not at all related to temperature. They are related to chemical reactions, that is why the singlet lines are absent. Without a doubt, the current view that the emission lines, in the Chromosphere are randomly produced, manifesting only local temperature cannot possibly be true. Please look at the spectrum in the following link and see how strong the lines relative to hydrogen <http://www.astrosurf.com/comolli/ecl17a.htm>

In reality, these emission lines are not produced randomly and they do not result from processes in thermal equilibrium. Thus, they cannot be used to set Chromospheric temperatures. Besides that, Saha equation cannot be applied. The use of the Saha equation in the Chromosphere can lead to errors of 100 trillion times in the ratio of ions observed (H. Zirin, The Solar Atmosphere, Blaisdell Publishing, Waltham, MA, 1966, p. 72). Furthermore, the infrared carbon monoxide (CO) absorption lines in the Chromosphere show that this region of the Sun is cooling with elevation. In other words, the temperature of the Chromosphere is decreasing with elevation above the photosphere. Keep in mind, that it is not proper to obtain the temperature of the Chromosphere from electronic emission lines, since those lines are not produced by processes in thermal equilibrium. The only way to determine the temperature is by analyzing absorption lines, specifically from carbon monoxide absorption lines which are not electronic emission lines, but rather they are vibrational - rotational Infra-Red absorption lines. Recently, one mainstream physicist wrote the following "The presence of cool molecular carbon monoxide at temperature below previously established temperature minimum has challenged our understanding of the basic thermal structure of the solar atmosphere and undermined our spectral diagnostics of cool stellar atmospheres (T.A. Schad and M.J. Penn, 2018). In fact, all recent observations about the Chromosphere, including radio and eclipse measurements are in direct contradiction to the existing models.

### **SHRAIRFUSION MODEL vs THERMONUCLEAR FUSION MODEL**

The greatest blunder in the history of physics, if not the history of science as a whole, will come out to be the hypothetical theory of thermonuclear fusion in the Sun and other stars. The so-called standard solar model-which we prefer to call standard solar dogma - is not even wrong.

**The external energy supply to the sun is overwhelmingly obvious and has recently been detected by space probes.** <http://www.journalcra.com/sites/default/files/23817.pdf>

**The Solar Neutrino Problem Has Not Been Solved.**

<https://cirworld.com/index.php/jap/article/view/5950>

All types of thermonuclear reactions are quasi-nuclear fusion reactions. These reactions can never be sustained for sufficient time which would allow the fusion process to be completed. Without sustainability the final phase of the fusion reaction cannot be reached and consequently the output energy or rather the energy gain cannot be obtained. According to the unwavering scientific belief of SHRAIRFUSION researchers, thermonuclear reactions are artificial or laboratory induced quasi-nuclear

reactions that should not be characterized as natural nuclear fusion reactions that take place in stars or anywhere else in the Universe. A long time of experimental research in different advanced countries using state of the art fusion devices have shown the quasi nature of the thermonuclear reactions. Yet, sadly, in spite of all those years and financial resources mainstream scientists never question the theory of thermonuclear fusion. Trillions of dollars and eighty years of research with different fusion devices and experimental reactors are still not enough to convince the mainstream scientists that the problem of nuclear fusion is exclusively rooted in the current theory not in the technical issues (innovative technology and sophisticated reactor design). Generated plasma from thermonuclear reactions will remain forever unsustainable and inefficient <https://www.linkedin.com/pulse/generated-plasma-from-thermonuclear-reactionsremain-ever-shrair>

However, in the last three years some fusion research centers and institutes in Asia, Europe and the US claimed to have breakthroughs that will lead to the realization of fusion power. Those claims are without scientific substance or rather without reliable data that can be examined by the scientific community. For instance, Lockheed Martin and the MIT have been claiming nuclear fusion breakthroughs every year for the last five years. And every year they stated that fusion power is only 15 years away not 16 years away! In fact, even in China, fusion researchers are under pressure and have claimed breakthroughs without showing any published data. In other words, the researchers did not publish how they achieved their claimed experimental results. It seems to us the method that the Chinese scientists used did not meet the basic rule of how fusion reaction should proceed (Lawson criterion). Most probably, the power supply was maintained to artificially increase (and only slightly) the confinement time of this quasi nuclear fusion reaction. Nothing could be further from the truth, the results of controlled thermonuclear fusion research-anywhere in world- did not change since the research started in the beginning of the second half of the last century. Fusion research groups are only looking for the taxpayers' money and maintain their administrative and academic positions. Nevertheless, the failure of the so-called controlled thermonuclear reactions is not the only evidence for their quasi-nuclear reaction nature. The H-bomb is additional empirical evidence that reveals the quasi nature of these kinds of reactions. Contrary to what is currently believed, the H-bomb is not a demonstration of thermonuclear fusion. The weapon device is based entirely on the process of fission reactions and its yield is by far smaller than what is widely believed. The H-bomb has contributed enormously to the tragedy of thermonuclear fusion. Researchers of SHRAIRFUSION, have no doubt that thermonuclear reaction does not take place in the Sun and does not contribute any significant role in the Hbomb. One should salute the outstanding Indian nuclear expert and former DRDO scientist K. Santhanam for exposing the truth about the H-bomb. He deserves the highest prize for being honest about this important issue that cost humanity and scientific progress dearly. See: A Real Thermonuclear Bomb does not exist. <https://www.linkedin.com/pulse/super-lie-jamal-shrair> Controlled Thermonuclear Fusion Research is a Waste of Money and Minds: The accumulated empirical evidence in the last seventy years has shown controlled thermonuclear fusion to be a complete waste of money and minds. It should have been abandoned decades ago. Experimentations with different types of facilities and methods are confirmation of the above statement. The so-called Magnetic Confinement Fusion (MCF) and the Inertial Confinement Fusion (ICF) are considered as the best methods to reach the goal of fusion power. With regard to the first method, there are around seven magnetic-mechanical configurations that are in use.

Standard Tokamaks, Spherical Tokamaks, Stellarators, Reversed Field Pinch, Levitated Dipole Experiment (LDX), Cusped Geometrics and Magnetic Mirrors. The ICF method uses four different configurations. Fast Ignition ICF, Direct Drive ICF, Indirect ICF and Heavy Ion Beams ICF. There is another method, called Inertial Electrostatic Confinement (IEC) that also has four different configurations, Penning Traps, Beams, POPS and Fusors. The other well-known methods are the pinches (Z-Pinch and ThetaPinch). Besides that, there is another method called Field-Reversed Configuration. Finally, there are the hybrids methods that are made from combining the abovementioned methods. Such as, Magneto-Inertial Fusion (short lived magnetic fields and ICF), Magnetized Liner Inertial Fusion (Theta Pinch and ICF), Magnetized Target Fusion (Field Reverse Configuration and ICF), Polywell nuclear fusion (Cusped Geometries and IEC), Screw Pinch (Theta Pinch and Z Pinch) and the Dynomak or the Spheromak. All these experimental approaches and efforts in the last a few decades could not produce one single useful reaction. The generated plasma could not be confined and the energy spent to create it is still higher than the output energy. It is worth noting that in case of the Inertial Confinement Fusion (ICF), the energy required to initiate the reaction" is still two orders of magnitude bigger than the energy produced by the reaction. One researcher with the National Ignition Facility (NIF) in the USA said, "Our total gain — fusion [power] out divided by laser [power] in — is only about 1%." [Ball, Philip "Laser Fusion Experiment Extracts Net Energy from Fuel," Nature, Feb. 12, 2014].

Since the research started on thermonuclear fusion decades ago there has been no nuclear fusion reaction that has been triggered, continued and self-sustained. Neither has the plasma been magnetically contained. Nor has any research group sparked a fusion reaction that has released more energy than it consumed. Trillions of dollars have been wasted-worldwide- on useless devices without achieving one of the above requirements. Obtaining positive energy, from these hypothetical reactions is physically impossible. So far, even with the newest fusion devices which were designed with supercomputer like the Stellarator Wendelstein (Wendelstein 7-x) in Germany, the net gain of positive energy does not exist and can never exist. In fact, up to date there's no experimental fusion device that could reach the break-even point, not to mention useable energy. Beside the financial loss, so many talents have been wasted and more will be wasted in the coming years chasing something which is not an elusive but rather illusive one. Sustainable nuclear fusion reaction that takes place in the Sun requires different conditions than what current fusion researchers are trying to provide. Fusion power on a large scale is only possible based on the physical reality of the Sun. Indeed, SHRAIRFUSION Model is based on the reality of the Sun and it is the only way. It is an absolutely peaceful nuclear energy source and without radioactive waste or harmful byproducts. Calculations showed that SHRAIRFUSION reactor would generate colossal energy output, by far higher energy output than what is expected theoretically from the hypothetical thermonuclear fusion reactor. Moreover, our proposed reactor has zero nuclear waste. The reactor is a 100% clean energy source-in every sense of the word while still generates colossal energy output. The fuel to be used is readily available and much more affordable than the current nuclear fuels. Furthermore, the operating temperature of the reactor is only thousands of degrees, compared to the millions of degrees assumed necessary for the hypothetical fusion reactor. Furthermore, SHRAIRFUSION reactor can be scaled from laboratory size to power plant size, but the bigger it is, the more challenging it will be to construct and control. The detail is part of the technical know-how of the reactor. Thankfully, the required cutting-edge technologies are already available in

various industries and we do not have to invent them. SHRAIRFUSION Company can provide a complete design of the laboratory scale reactor that would demonstrate the true nuclear fusion process which takes place in the Sun, including all the components of the reactor, its fuels and operating principles. Furthermore, the prototype reactor can be constructed based on the laboratory scale one, although engineering tolerance and technical skills will be needed to achieve stable reactor. SHRAIRFUSION model is the only realistic model that can replicate the real nuclear fusion process that takes place in the Sun. In addition to that, the proposed model explains all the observed features of the Sun, including all phenomena that are currently considered mysteries and even mathematical models do not exist to explain them. Moreover, and more importantly, we genuinely believe at SHRAIRFUSION LTD, that this model is the most devastating proof and the biggest empirical truth in the last 120 years. It would rescue the king of all sciences from pseudo physics notions which made it much closer to mysticism than the science that should follow the Universal rule of cause and effect. More importantly, the greatest scientific progress can only be achieved based on the empirical truth of our star, and that can only be realized by replicating its energy production based on its physical reality. This scientific breakthrough will mark the start of the astronomical revolution and the real age of space exploration that will lead to the development of advanced technologies in all industries.

The link below contains some of the research activities of the leading researcher at SHRAIRFUSION:  
[https://scholar.google.hu/scholar?hl=hu&as\\_sdt=0%2C5&q=jamal+shrair&oq=](https://scholar.google.hu/scholar?hl=hu&as_sdt=0%2C5&q=jamal+shrair&oq=)

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