

Nobel Prize in Physics: A highlight on uncovering early intelligent design in the universe

Once, Elon Musk, the founder of SpaceX and CEO of Tesla, was asked about his beliefs in God, and he responded that he believes in the laws of physics. Musk's answer indicates that he aligns himself with a modern intellectual movement and a new philosophical doctrine that seeks to explain the universe and answer existential questions through the advancement of experimental sciences rather than philosophical and theological abstraction.

Stephen Hawking was one of the pioneers of this movement, aiming for a theory of everything that unifies the laws and frameworks of physics under the title of the theory of everything. Other famous physicists of this theory include Lawrence Krauss and Richard Dawkins, known for their work on the origin and evolutionary advancement. What distinguishes this movement is its attempt to present ideas beyond religion in an attempt to explain the universe and existence without the need for a transcendent being, considering themselves liberated from moral restrictions by denying the existence of a transcendent, rational, and detached God who holds people accountable for their actions.

In the philosophical sense, traditional philosophy focused on both Greek and Eastern philosophy, dealing with existing entities as they are defined by Al-Farabi's definition. It answers the question, "Why does the universe and existence exist?" while the natural sciences and their extensions deal with the question of "How life formed and entities came into existence."

One of the pillars of this approach is to replace traditional philosophy with the philosophy of the physics that governs the material world, thereby eliminating the role of philosophy in mediating between science and religion. Most philosophers in history, such as Socrates, Plato, and Aristotle, were considered divine. They held Aristotle in high regard as the first teacher.

The transcendent supreme wisdom expressed by philosophers like Kant, Hume, Avicenna, as well as Bacon and Descartes, was that philosophy and mental sciences, including causality, are the instruments of abstraction that govern all sciences and the scientific method, linking natural phenomena to their causes of origin.

In reality, thinkers like Krauss, Hawking, and Dawkins fell into a fallacy concerning the fundamental principles of the natural and physical sciences, which are their area of expertise. By denying any

existence beyond the material, they deduced the eternity of matter, which refutes one of the most famous theories in the history of modern physics, the theory of the Big Bang.

Moreover, they denied causality and the regularity of the universe, which David Hume talked about, rejecting the inevitability of the harmony of cause and effect with the passage of time. They challenged some of the foundations of inductive and Aristotelian logic, suggesting a state of methodological chaos and a lack of established criteria that govern the explanation and understanding of natural phenomena.

In the midst of this raging debate about the philosophy of science, from the perspective of Krauss, Hitchens, and Dawkins, who do not see clarity in the creative design of the universe, one physicist stands in opposition. Roger Penrose, a mathematical physicist, was awarded the Nobel Prize in Physics in 2020.

What distinguishes Penrose's research is that he mathematically proved the impossibility of a random universe and the impossibility of its regularity through the convergence of apparent coincidences. He based his argument on the concept of entropy in the laws of thermodynamics.

Since entropy is high in random systems, Penrose demonstrated that the entropy of the universe at the time of the Big Bang, approximately 13.8 billion years ago, was extremely low, a number represented by 1 divided by 10 to the power of 10 to the power of 123 ($10/1^{10^{123}}$). This implies that the universe was highly ordered and organized from its earliest moments, which supports the hypothesis of intelligent design. "This shows the extent of precision that the Creator aimed for, with a precision of one part in $10^{10^{123}}$. It is truly amazing," as mentioned in Penrose's words.

Penrose believed that the universe is a book written in the language of mathematics. Through this language, he disproved the fallacy of coincidence in complex and meaningful systems, reaching philosophical and theological heights by placing things in their proper places based on his induction, and his mindful reasoning