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Non-duality of Vedanta and Quantum Mechanics

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ABSTRACT

Physicists have come up with an ingenious experiment which proved that quantum physics is absolutely right. The paradoxical aspects of quantum physics can be easily explained by applying the principles of Advaita Vedanta. They basically proved that universe is not real. The relationship between us and our dream perfectly represents the relationship between Brahma and the Universe. The all-pervading Consciousness bringing the Universe into existence cannot be equated to a puny little observer. Nothing that happens in our dream has any impact on us because we are the witness of our dream.

Keywords: Advaita Vedanta, Universe, Observer, Brahma, Witness Consciousness, Quantum Physics, Einstein, Science, God

1. Introduction

In 2022, scientists who provide cogent arguments against the existence of the universe was awarded the Nobel Prize in Physics. The principles of Vedanta are timeless. Advaita Siddhanta argues that the Universe does not exist and that the presence of a self-aware observer or witness is what really causes the cosmos to come into being. Data from a branch of Quantum Physics that won a Nobel Prize backs up both of these claims. There are several connections between Vedanta and Quantum Mechanics that go beyond the surface level.

The findings of the oldest philosophy in the world have been confirmed by modern scientific research. Advaita Vedanta offers a straightforward explanation for the apparently incompatible features of Quantum Mechanics. After centuries of meticulous study, the knowledge of Indian rishis has finally been uncovered. The cosmos was generally accepted as an objective reality prior to Einstein. In the past, time and space were not just concepts but Universal realities in and of themselves. No matter where we are in the cosmos, we can always calculate the exact time and distance between any two places in space.



Fig.1. Prize in Physics 2022 award Winners jointly Alain Aspect, John F. Clauser and Anton Zeilinger

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For their work in 2022, Alain Aspect, John Clauser, and Anton Zeilinger shared the Nobel Prize in Physics for their discoveries of the Quantum Nature of reality. Their joint testing provided more evidence for entanglement, a strange quantum phenomenon in which two separated particles seem to communicate despite having no physical means of doing so. When two particles seem to communicate with one another while having no actual means of doing so, this is known as entanglement.

Albert Einstein, Niels Bohr, and Erwin Schrodinger had a fierce argument over the nature of the cosmos in the 1930s. Entanglement was a key concept here. According to Einstein, all objects in the Universe needed to exist independently in order to be deemed realized. It's not enough to just be able to see the moon or a single photon of light for them to be deemed genuine. Even In spite of this, Bohr, Schrodinger, and the other forefathers of Quantum Physics came to the conclusion that reality seemed to be inherently ambiguous. They realized that a particle's properties are vague before they are measured.



Fig.2. Entanglement

A mechanism for distinguishing between these two potential worlds gave rise to the concept of entanglement. Then, Aspect and Clauser carried out an investigation into critical thinking that had been previously published by physicist John Bell in a number of different experimental formats. The evidence lent credence to Schrodinger's hypothesis. The fundamental governing principle of the universe was known as quantum mechanics.

It is anticipated that the discovery of entanglement will motivate the development of a new generation of quantum technologies, in addition to having profound implications for the philosophy of shifting paradigms. Zeilinger has been at the forefront of quantum networking, teleportation, and cryptography via the development of techniques that leverage entanglement.

2. Einstein's theory of relativity way to Advaita

Einstein's theory of relativity pulverized the thought and it has illustrated that time depends on the vantage point of an onlooker. In case we are moving close to the speed of light, time itself will direct down, and people voyaging at particular speeds will experience assorted times. The same is honest to goodness for space; assorted people voyaging at differing speeds will degree two centers in space in an unforeseen way. Space itself draws back and expands depending on the observer's point of see.

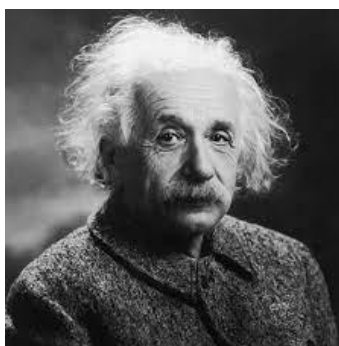


Fig.3. Albert Einstein

The distinction between what is and what occurs is abolished by relativity. The witness came to play a crucial role in shaping the universe. The primary significant blow to objective perception of reality was this. In any case, Einstein's hypothesis did not assert that a knowledgeable witness was necessary for this plan. The development of Quantum Mechanics was the subsequent significant setback. The twofold opening investigation, a well-known research project in Quantum Mechanics, demonstrated that particles do not exist at all until they are observed. Particles are brought into existence by perception, which has recently been initiated by someone. One way to think of a molecule is as a set of probabilities; A molecule does not really exist until it is observed. The authors of Quantum Mechanics, such as Heisenberg and Neil Boer, came to this conclusion. The spectator is abruptly pushed to the extreme center of reality by Quantum Mechanics.

"Do you really doubt the moon exists even when you can't see it?" According to legend, in reaction to Quantum Physics findings, Einstein said. Several features of Quantum Physics contradict common sense. Einstein used these problems to refute Quantum Theory. Entangled particles, which were central to

his thesis, were unusual in a number of ways. Quantum theory predicted the existence of a “special kind of particles” called “entangled particles”. Particles that have been entangled are like identical twins; their behaviors are a perfect replica of one other. They reflect each other and rely on one another. Particles are very sensitive to one another, and any change in behavior in one causes an instantaneous response in the other. Einstein described Quantum entanglement as "spooky action at a distance." He said that the possibility that Quantum particles may telepathically converse with one another was proof that the theory was incomplete or incorrect.

When questioned how any scientist in their right mind could ever accept such a result, Einstein postulated that such particles could under no circumstances be real. Particles that are separated by billions of light years but instantly know each other's state, which suggests that information is travelling faster than the speed of light. This paradox was the subject of essays written by a number of well-known scientists of the time, such as Einstein Schrodinger, who argued that it was proof that quantum theories were incorrect. As a consequence of this, an experiment was carried out to verify that Quantum entanglement is a genuine phenomenon, which resulted in the unexpected finding of entangled particles. A magician is now putting on a show for us that includes a number of mind-boggling tricks.

3. Ancient truth proved today

If we could deduce their characteristics, we could provide a perfectly rational explanation for their behavior without having to resort to Quantum Physics for very long at all. Despite our best efforts, we will never be able to fully explain this; it's just beyond our comprehension. Between these two possibilities for entangled particles, the field of physics stalled, leading to the 2022 Nobel Prize in physics being shared by Allen Aspect, John Clauser, and Anton Zeilinger.

There was no way to definitively determine if it was magic or a trick prior to the involvement of these experts. These scientists designed a brilliant experiment that demonstrates the correctness of Quantum Theory. Ultimately, the debate was settled in favor of Quantum Physics due to the observation that particles billions of light years apart may instantly determine the state of the other particle.

Many physicists believe that creating sentient observers was the Universe's overarching goal. It's possible that the cosmos lacked any form and structure before the advent of observation. These events are more consistent with metaphysics than science. When seen through the lens of Vedanta, it makes perfect sense, just as quantum physics proves that the universe is not real but an illusion; thus, what is real and what is providing the solution, the only thing that is genuine, is awareness.

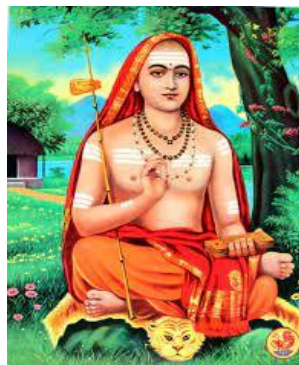


Fig.4. Sri Aadi Shakti

4. Consciousness

There is a widespread agreement among experts in the scientific community that consciousness is neither an invention nor a relatively recent addition to the human experience. Consciousness serves as the primary support structure for all of creation. The universe was first brought into existence by consciousness. Consciousness is both the place where it begins and the place where it ultimately ends. Brahma is the term given to the underlying awareness that Vedanta considers to be the source of all things. According to Vedanta, Brahma is the source of all things. This may be shown by employing the common metaphor that the cosmos is like a dream, and that Brahma is comparable to the person who dreams.

To begin, we are the ones who bring the dream into existence, we are the ones who keep it alive, and we are the ones who will bring it to a successful finish.

Our ideal is something that we collectively create, maintain, and eventually do away with. In the same way, Brahma, the overarching principle that underlies awareness, operates. This third connection, which is the one between our waking world and the dream world, is the trickiest to make. Everything that happens to us in our dreams is only an illusion. Is there anything that takes place in our dreams that continues to have an impact on our lives long after we have awakened? Take this into account moving forward.

The only real link we have to our dream is that we both had this dream, thus that is the only thing we have in common with us. We discuss the potential that our dream may become a reality between the two of us. Even before we opened our eyes, our unconscious thoughts had already ascertained that this was the case. What possible bearing could this possibly have on anything? To put it more simply, in the dream world, nothing can happen unless we are there to see it.



Fig.5. Universe

Is there anything more about our dream that we could talk about? The investigation itself was flawed, to be sure. Could it be that just because something only appears in a dream, it does not exist in waking life? Think about the implications before we dismiss it out of hand. Similarly, everything in the real world exists solely as a result of our visual perceptions, and the same is true in our dreams. Similar threads link Brahma and the Universe together.

Despite being the origin of all things, the place where they all exist, and the destination for all things, Brahma has no involvement in the cosmos. Vedanta calls Brahma Sakshi Chaitanya, which may be interpreted as “witness consciousness” or “observing awareness”, because of this. This second major intersection between Vedanta and Quantum Mechanics marks a watershed moment for both disciplines.

All Brahma, the expanding essence of awareness, does is watch and listen as the cosmos grows. Since no one has yet discovered a Sakshi particle, we may assume that they do not exist. Particles are created during the process of observation. Give this some consideration. At this stage, we can confidently say, “This is a major improvement”. There is no comparison between the mind that conceived and built the cosmos in which we exist and a little observer in the depths of space.

Finding the solution to this puzzle will be like arriving at the pinnacle of Vedanta and the core of its guiding principle. Let's try something out in our heads that's similar to what Albert Einstein suggested. Let's pretend for a moment that our goal is entirely attainable. Anything that happened in our dream was entirely the result of our own creative thinking. But what are we to make of the people that visited us in our dreams? They are not impersonal things but rather sentient beings with their own identities. If their minds are so advanced, where do they get all of the information that they use? Have we allocated 10% of our whole awareness to each of the ten people in the dream? Instead, you are one continuous stream of awareness that shares this dream world with all of us.

Now it's time to talk about the creative characters that populate our story. Everyone believes that the universe exists independently of them, that they are autonomous beings with no ties to the rest of humanity, that they have no insight into the motivations of others, and that they have no control over the mundane parts of their lives.

The dream's deceiving nature is to blame for this faulty analysis of reality. “Maya” is the term used in Vedanta to describe this misleading effect. While dreaming, our emotions and reactions to the world around us seem to take on a life of their own, despite the fact that we are completely oblivious to the truth of the scenario. Each of us acts as a portal via which your awareness may enter our shared dream. Instead of being made up of numerous different people and things, the dreamer is the sum total of everything and everyone that appears in the dream. If all a lab rat can do is watch, how can it possibly come up with anything new? This is a legitimate assertion to make given that an observer is the all-knowing intelligence that was answerable for the formation of the cosmos.

It should be evident that Advaita Vedanta gives a full explanation for these basic rules of Quantum Physics. Both Vedanta and Quantum Physics agree on the meaning of the word “Maya”, which may be translated as “ultimate reality”. The concept that the Universal observer, or awareness, is what causes things to come into existence is common to both Vedanta and Quantum Mechanics. Saakshi Chaitanya, the awareness that gives birth to the cosmos and pervades all of existence, is everywhere and nowhere at the same time. The Unexpected Connections Between Vedanta and Quantum Physics.

5. Conclusions

Researchers in the field of physics have devised a brilliant experiment, which has shown beyond a reasonable doubt that quantum physics is correct. When the principles of Advaita Vedanta are used, it is possible to provide straightforward explanations for the seemingly contradictory parts of quantum physics. They demonstrated, in essence, that the cosmos does not exist. The link that exists between us and our dream flawlessly illustrates the connection

that exists between Brahma and the whole universe. It is impossible to compare an insignificant observer like ourselves with the all-pervasive Consciousness that is responsible for bringing the universe into existence. Because we are the observer of our dream, nothing that takes place in it can have any effect on how we feel or behave.

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