



The Relationship Between God Particles: Dark Matter and Time Dimensions

Fanesa Oktavianes Aulia ¹, Maulidatul Aulia ², Fareza Chandri Maharani ³, Dewi Ghitsatul A'la ⁴

¹ Institut Agama Islam Negeri Kediri , Indonesia

² Institut Agama Islam Negeri Kediri , Indonesia

³ Institut Agama Islam Negeri Kediri , Indonesia

⁴ Institut Agama Islam Negeri Kediri , Indonesia

Corresponding Author: Fareza Chandri Maharani E-mail: fareza99chandri@gmail.com

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ABSTRACT <p>The God particle or Higgs Boson is a subatomic particle first proposed in 1964 and discovered in 2012 at CERN. It is an integral part of the Standard Model of Particle Physics, which explains the relationship between subatomic particles and the fundamental force. Dark Matter is hypothetical matter that interacts gravitationally with baryonic matter, but does not interact with the electromagnetic or strong and weak nuclear forces. Although invisible, dark matter is believed to make up the majority of matter in the universe. The Time Dimension is a dimension where objects move through time, indicating multiple points in space and time. In theoretical physics, the concepts of dark matter and the God Particle have been associated with additional dimensions of time. Some theories propose that additional time dimensions can be used to explain phenomena such as Dark Matter and the Higgs Boson. However, there has been no direct experimental evidence of additional time dimensions or how the God Particle and Dark Matter are related to additional time dimensions. In conclusion, the relationship between the God Particle, Dark Matter, and the Dimension of Time is still a topic of intense research in theoretical and experimental physics.</p> <p>Keywords: <i>Dark Matter, Particle God, Time Dimension</i></p>			

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INTRODUCTION

This introduction states that everything consists of energy and originates from a single point referred to as God Source or "God". God Source is a crystalline, coherent, and completely understandable source of energy, which is also referred to as consciousness. Energy consists of small units called 'quanta' of energy, and in this case, the energy quanta of consciousness can interact with each other. This interaction creates the reality of

consciousness. God Source is the all-powerful, all-knowing, omnipresent consciousness. Essentially, God Source describes consciousness vibrating as a Scalar or Stationary energy wave between plus and minus infinity of time, known as the eternal present moment.

God particles are the basic elements that make up the universe. They are the smallest and most fundamental particles in the universe, forming the basis of everything in it. There is a belief that everything should consist of simple things rather than complex ones. Suggesting that subatomic particles such as quarks and leptons are the building blocks of the universe as a whole sounds absurd, and goes against our experience and knowledge. Instead, something as simple and general as photons should be the basic building blocks of all matter in the universe. While considering photons as the basic building blocks of the universe sounds strange, consider why we find photons everywhere in the universe, such as in thermal radiation, nuclear reactions, electron oscillations, particle collisions, even in the early stages of the Big Bang explosion. If photons really are the basis of all matter in the universe, then the structure of photons themselves, their origins, and how they combine to form subatomic particles will be a huge challenge for scientists.

In 2012, inside the Large Hadron Collider, particles collided inside a large tube with a diameter of 27 km, producing the Higgs boson particle that Peter Higgs and other physicists had predicted in the 1960s as the indivisible fundamental particle.

The discovery of the Higgs Boson particle in 2012 earned Peter Higgs and Francois Englert the Nobel Prize in Physics in 2013. Both are physicists who formulated the theory known as the Higgs mechanism in the 1960s.

RESEARCH METHODOLOGY

This research uses the literature study method to collect and analyze information related to the relationship between god particles: dark matter and time dimensions. Literature study is a process of research and analysis of relevant written works in a particular field of knowledge or topic that aims to understand, synthesize, and interrupt pre-existing information. This literature study method is used to support research, identify problems, develop a theoretical basis, and understand the development of knowledge in a field. In the literature study, the research collected and presented existing information in the form of papers, scientific articles, journals, and various sources from the internet and google scholar. The keywords used are God particle, dark matter and time dimension. This literature search uses articles between 2020, 2021, 2022, 2023.

RESULT AND DISCUSSION

From the results of the literature that researchers get Physicist Peter Higgs sparked the idea of the existence of material that fills the entire space between particles, called the Higgs field. This field acts like mud that makes it difficult for our feet to move when immersed in it. Elementary particles like quarks and electrons gain mass because they interact with the Higgs field. The stronger their interaction, the more mass they gain. The excitation or splash of the Higgs field is called the Higgs Boson particle. (ikons, 2019). Bosons are the name of particles that tend to cluster with similar particles, while the Higgs

Boson particle is a Boson particle that also interacts with other particles that make up matter, causing it to have mass. Every piece of matter in the Universe is made up of atoms. As we know, atoms are made up of nuclei (protons and neutrons) and electrons that surround them. Electrons are so small compared to the nucleus that they don't contribute much to the mass of the atom, so if we assume that the mass of the atom comes from the protons and neutrons, it's not true. Protons and neutrons are made up of three elementary particles called quarks. The mass of protons and neutrons does not come from the sum of the masses of these quarks, but from the energy that binds them. Without mass, these elementary particles would continuously move at the speed of light with nothing to stop them. Quarks wouldn't bind together to form protons and neutrons, so atomic nuclei wouldn't form. Without atoms, the universe and its contents would not have formed.

a. Dark matter

Known as one of the biggest unsolved mysteries in Particle Physics, Astrophysics, and Cosmology, DM is a hypothetical form of matter that is estimated to account for about 85% of the matter in the Universe. Most of the evidence for the existence of DM is given and how the scientific community, throughout a century of research and experimental observations, implies the existence of this unknown matter that does not interact with electromagnetic (EM) fields, making it extremely difficult to detect. (Chaves, 2023). Dark matter is called "dark" because it does not seem to interact with the electromagnetic field which means it does not absorb, reflect or emit electromagnetic radiation making it difficult to detect. (Yash Narendra Chaudhari, 2023). Dark matter slows down the expansion of the universe, while dark energy accelerates it. Dark matter acts like a force of attraction, a kind of cosmic cement that holds our universe together.

b. Time Dimension

The relationship between momentum in space and time is inversely proportional, meaning that an increase in one quantity causes a decrease in the other. When evaluating periods of days, momentum is a more appropriate metric than velocity because time results from the rotational motion of the earth on its axis. The mass of an object is a fundamental characteristic that indicates its existence in three-dimensional space and is affected by the gravitational attraction of the sun.

His hypothesis states that atoms were the first form from which the Big Bang singularity originated. According to the postulated atomic model, there is a relationship between time and momentum, which implies that the universe is a manifestation of atoms. The initial momentum of electrons orbiting the nucleus is thought to have triggered the big bang and the beginning of time in the cosmos. In addition, it is believed that atoms form various cosmic formations, such as solar systems and galaxies, resulting in a comprehensive model of the universe. Since planetary velocities cannot temporarily reverse, the arrow of time cannot move backwards in time (Bandari, 2019). Since there is no intrinsic static element in a vacuum, motion and time cannot vanish at rest. Nonetheless, the phenomenon of motion in a vacuum can result in considerable

contraction, often referred to as the "big crunch". This increases the possibility of temporal regression, where time can travel backwards to the beginning of existence, allowing events of the past to happen again. This discovery implies that our existence will not be destroyed after the big bang due to the abundance of matter; instead, it implies the possibility of an existence beyond our current life. The inverse relationship between time and velocity leads to three distinct planetary movements that contribute to the passage of time: rotation on the planetary axis, which results in the formation of days; orbital motion around the sun, which results in the formation of years; and the combined orbital motion of the planet and sun around the supermassive black hole at the center of the galaxy, which results in the formation of years. The three widely accepted dimensions of time are as follows. According to current beliefs, the possibility of time travel exists beyond our dimension, in a parallel reality.

CONCLUSION

It can be concluded that Bosons are the name of particles that tend to cluster with similar particles, while the Higgs Boson particle is a Boson particle that also interacts with other material constituent particles, causing it to have mass. Every piece of matter in the Universe is made up of atoms. As we know, atoms are made up of nuclei (protons and neutrons) and electrons that surround them. Without mass, these elementary particles would continuously move at the speed of light with nothing to stop them. Quarks would not bind together to form protons and neutrons, so atomic nuclei would not form. Without atoms, the universe and its contents would not have formed. Dark matter is called "dark" because it does not appear to interact with the electromagnetic field, meaning it does not absorb, reflect or emit electromagnetic radiation, making it difficult to detect (Yash Narendra Chaudhari, 2023). Dark matter slows down the expansion of the universe, while dark energy accelerates it. Dark matter acts like a force of attraction, a kind of cosmic cement that holds our universe together.

In the time dimension, the relationship between the momentum of space and time is inversely proportional, meaning that an increase in one quantity causes a decrease in the other. His hypothesis states that the atom is the first form from which the Big Bang singularity originated. According to the postulated atomic model, there is a relationship between time and momentum, which implies that the universe is a manifestation of atoms. Moreover, it is believed that atoms form various cosmic formations, such as solar systems and galaxies, resulting in a comprehensive model of the universe. Since planetary velocities cannot temporarily reverse, the arrow of time cannot move backward in time.

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