

Einstein's Trilogy of Erroneous Theories

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Abstract

General Relativity. In 1915, Albert Einstein developed his theory of general relativity, the geometric theory of gravitation that presumes gravity to be the result of geometric distortion of four-dimensional spacetime by massive objects. This alleged distortion supposedly changes the trajectories of objects moving through space and even the paths of light rays as they pass by massive objects. 4-D spacetime is a mathematical illusion that does not exist, does not curve, and cannot possibly interact with the physical force of gravity.

Mass-Energy Equivalence ($E = mc^2$): The $E = mc^2$ equation in Albert Einstein's theory of special relativity expresses the idea that mass and energy are the same physical entity and can be changed into each other. $E = mc^2$ is an unverifiable assumption that is considered proof for mass-energy equivalence. This circular reasoning, the logical error of including the conclusion in the assumption then using the assumption to prove the foregone conclusion, invalidates mass-energy equivalence theory. Nuclear fission and nuclear fusion are reactions in which matter is converted to energy. There are no reactions in which energy is converted to matter; it has never happened.

Photon Theory: In 1905, Albert Einstein proposed that light would be better explained by modelling electromagnetic waves as consisting of localized discrete wave-packets, which he called *light quanta*. In 1926, Gilbert N. Lewis coined the term *photon* for this falsely presumed quantum of radiant energy. Individual photons are merely inferred to exist because of their apparent effect on photoelectric systems. This is the logical error of circular reasoning, i.e., including the conclusion in the assumption, then using the assumption to prove the conclusion: it is assumed that photons exist, and measuring their effects is proof of their existence.

Key words: *Einstein; Relativity; Spacetime; Gravity; Mass-Energy Equivalence; Photons*

Disproof of General Relativity

In 1915, Einstein developed his theory of general relativity, the geometric theory of gravitation that is the current description of gravity in modern physics [1]. Einstein proposed that gravity is the result of a geometric distortion of four-dimensional spacetime by massive objects. The more mass that produces gravity in a body, the more distortion you get. This distortion supposedly changes the trajectories of objects moving through space and even the paths of light rays as they pass close by massive objects. Simply stated, massive objects bend the space around them, causing other objects to deviate from the straight lines they otherwise would have followed. Einstein chose the Minkowski spacetime model to depict graphically the gravitational forces presumed by general relativity [2].

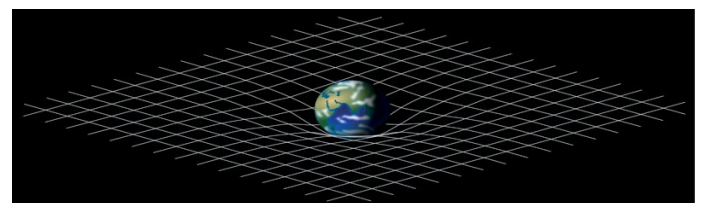


Figure 1: Hypothetical Fabric of Spacetime

In this model, a massive object (planet or star) appears to be sitting on a fourth-dimensional spacetime fabric, weighing it down, as a heavy ball would do to a rubber membrane in three dimensions. A beam of light passing close by the Sun, for example, would theoretically follow the lip of the curved spacetime fabric, causing it to bend towards the Sun (rather than pass by it in a straight line). General relativity thus depends on the fol-

lowing three unverifiable assumptions: (1) 4-D spacetime is real, (2) spacetime curves, and (3) spacetime interacts with gravitational forces of massive objects [3].

Spacetime is a mathematical model that supposedly fuses the three dimensions of physical space and the abstract (nonphysical) dimension of time into a single four-dimensional physical continuum. This is a fanciful graphical excursion that bears no relation to reality.

Suppose a world of two dimensions could exist and you wish to represent it on a three-dimensional graph. How would you know if that circle you see is a sphere, a cone, a cylinder, a dome, or something else? It is not possible to extrapolate meaningful information from two dimensions into three, nor from three into four.

Time measures the changing positions of objects and sequences of events that occur within space. Time is thus an abstract (nonphysical) measurement within the 3-D. Time cannot be extracted from space and projected onto a fourth supposedly physical axis with its own independent set of reference points. Whatever model you create that includes mathematical measurements of an intangible dimension cannot possibly be real. To believe in spacetime is to believe in at least one direction to which one cannot point.

Spacetime cannot curve because spacetime is not real. It is an illusion. All Einstein accomplished with 4-D modelling was a fanciful graphic diversion that cannot possibly exist. Nothing about it explains how gravity could possibly bend light.

Although general relativity is the accepted definition of gravitation in mainstream physics, this theory is fatally flawed. Spacetime is the geometric illusion that can be expressed algebraically as $3D + 0D = 4D$ (where $D = \text{dimension}$). Logic tells us that geometric spacetime is not real, does not exist, does not curve, and cannot possibly interact with or be affected by gravity [3].

Geometry is the mathematics of the properties and relations of points, lines, and surfaces – as well as the relative locations of objects. Mathematics is an abstract form of measurement and not a physical thing. As such, geometry can neither cause nor be

influenced by anything that exists in physical reality. General relativity fails because it presumes that a physical force (gravity) interacts with an abstraction (geometry) that has no physical existence [3].

Conclusions

Four-dimensional spacetime is a mathematical illusion that is hereby disproven. No theory can be valid if it is based on a false assumption. Therefore, Einstein's theory of General Relativity is also hereby disproven. We are left with the inescapable conclusion that Newton's universal law of gravitation is the only viable explanation for gravity [4].

Mass-Energy Equivalence ($E = mc^2$) is Invalid

The $E = mc^2$ equation in Albert Einstein's theory of special relativity expresses the idea that mass and energy are the same physical entity and can be changed into each other. In this equation, the increased relativistic mass (m) of a body times the speed of light squared (c^2) is equal to the kinetic energy of that body [5]. Kinetic energy is the form of energy that an object or particle has by reason of its motion.

$E = mc^2$ is an unverifiable assumption that is considered proof for mass-energy equivalence. This is circular reasoning (aka begging the question), the logical error of including the conclusion in the assumption, then using the assumption to prove the foregone conclusion. Circular reasoning invalidates the mass-energy equivalence hypothesis.

Nuclear fission and nuclear fusion are reactions in which matter is converted to energy. There are no reactions in which energy is converted to matter; it has never happened. Therefore, mass-energy equivalence is an erroneous theory. Nuclear fission is a reaction in which the nucleus of an atom splits into two or more smaller nuclei. The fission process releases a very large amount of energy [6].

In some reactions, matter particles can be destroyed and their associated energy released to the environment as other forms of energy, such as light and heat. One example of such a conversion takes place in elementary particle interactions, where the rest energy is transformed into kinetic energy [7]. In nuclear weapons, the protons and neutrons in atomic nuclei lose a small amount of their original mass. Nuclear fission allows a tiny

fraction of the energy associated with mass to be converted into radiation energy [8].

Nuclear fusion is the process by which nuclear reactions between light elements form heavier elements. In cases where the interacting nuclei belong to elements with low atomic numbers, substantial amounts of energy are released.

Conclusions

The $E = mc^2$ equation in Albert Einstein's theory of special relativity is an unverifiable assumption that is considered proof for mass-energy equivalence. This circular reasoning, including the conclusion in the assumption then using the assumption to prove the foregone conclusion, invalidates the mass-energy equivalence hypothesis. Nuclear fission and nuclear fusion are reactions in which matter is converted to energy. There are no reactions in which energy is converted to matter; it has never happened. Mass-energy equivalence is an erroneous theory.

Photons are Nonexistent

Light: electromagnetic radiation of any wavelength that travels in a vacuum with a speed of 299,792 meters (186,282 miles) per second.

Photon: an elementary particle that is a quantum of the electromagnetic field, including electromagnetic radiation such as light and radio waves. Photons are massless.

Particle: a small, localized object that can be described by physical properties, such as volume, density, or mass. Particles vary in size or quantity, from subatomic particles like the electron, to microscopic particles like atoms and molecules, to macroscopic particles like powders and granular materials.

Elementary particle: a subatomic particle that is not composed of other particles. The Standard Model lists 61 different elementary particles including electrons, leptons, quarks, fermions, bosons, protons, and neutrons. Photons are excluded from this Standard Model listing [9].

Something is seriously wrong with the definition of photon. Particles are tiny bits of matter that have mass and are localized (i.e., are part of physical objects). Photons are massless and nonlocalized (i.e., radiating everywhere) and thus cannot

logically be particles. Photons are not subatomic and thus fall outside the scope of quantum physics.

Visible light is electromagnetic radiation that can be perceived by the human eye. Visible light has wavelengths in the range of 400–700 nanometres (nm), corresponding to frequencies of 750–420 terahertz (THz), between the infrared (with longer wavelengths) and the ultraviolet (with shorter wavelengths).

In 1905, Albert Einstein published a paper in which he proposed that light would be better explained by modelling electromagnetic waves as consisting of localized, discrete wave-packets. He called such a wave-packet a light quantum [10]. Einstein thus modified the description of a phenomenon to fit his preconceived notion. Light is ever-present electromagnetic energy that radiates in waves with steady amplitudes and frequencies. Quantum theory is thus irrelevant to the nature of light, which does not propagate in packets. In 1926, physical chemist Gilbert N. Lewis coined the term photon for this falsely presumed quantum of radiant energy [11].

Individual photons are merely inferred to exist because of their apparent effect on photoelectric systems. In a photomultiplier tube, a photon strikes a metal plate and knocks free an electron, initiating an ever-amplifying avalanche of electrons. On a microscopic capacitor, an incident photon generates a charge that can be detected. In a Geiger counter, photons ionize gas molecules [12]. Such inference is fatally flawed, however. What is being observed in all three cases is electromagnetic energy moving electrons. There is nothing in these observations to indicate or even suggest that this electromagnetic energy could be in the form of elementary particles (photons). This is the logical error of circular reasoning, i.e., including the conclusion in the assumption, then using the assumption to prove the conclusion: it is assumed that photons exist, and measuring their effects is proof of their existence.

There is neither physical evidence nor logical reason for the existence of photons. Alleged photon particles are falsely presumed to exist because of faulty logic and misinterpretation of evidence.

In 1804, Thomas Young established the wave the-

ory of light [13]. He did so by means of an interference experiment (predecessor of the double-slit experiment) in which he reflected sunlight with a steering mirror through a small hole and split the beam in half using a paper card. He also mentioned the possibility of passing light through two slits in his description of this experiment.

When light passes through a hole or slit, it diffracts. Diffraction is the interference or bending of waves through an aperture into the region of geometrical shadow of the aperture. The diffracting aperture becomes a secondary source of the propagating wave. Particles (electrons, protons, atoms) that are fired as projectiles through a double-slit apparatus do not diffract. They are detected as white dots on a screen. Light diffracts. Particles do not. Thus, light cannot be composed of particles.

When particles are allowed to build up one by one before passing through a double slit, however, an artificially induced diffraction pattern emerges [14]. Misinterpretation of these results became the basis of erroneous wave-particle duality theory, namely that quantum entities supposedly exhibit either particle or wave properties depending on the experimental circumstances.

Conclusions

Photon theory is a failed hypothesis. Alleged photon particles have falsely been presumed to exist because of faulty logic and misinterpretation of evidence. Double slit experimental results became the basis of wave-particle duality theory, i.e., that quantum entities supposedly exhibit either particle or wave properties depending on experimental circumstances. Light, however, is not a quantum entity. It is electromagnetic energy that propagates in steady waves. Particles are tiny bits of matter that are incapable of independent motion and thus have no intrinsic wavelike properties. To extract particles from matter and fire them through slits as projectiles is an artificial construct that is irrelevant to the study of light. Light is a continuous electromagnetic wave. Particles are matter. There is no duality.

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