

Einstein was Mistaken about Gravity

Rowland D*

Independent Researcher registered with ORCID, Canada.

Corresponding Author: David Rowland, Independent Researcher registered with ORCID, Canada.

E-mail: david222@hush.com

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Abstract

Einstein's general relativity (GR) is the geometric theory of gravity that has become the accepted definition of gravitation in modern physics. GR proposes that gravity is the result of a geometric distortion of hypothetical four-dimensional spacetime by massive objects. The more mass that produces gravity in a body, the more distortion presumably results. 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. Unfortunately, GR is a fatally flawed theory that is a diversion from how gravity really works. This study explains the logical errors, false assumptions, and misinterpretation of evidence upon which GR is based. Geometric spacetime does not exist, does not curve, and cannot possibly interact with or be affected by gravity.

Keywords

Einstein; Relativity; Spacetime, Gravity; Astrophysics; Cosmology

Introduction

In 1916, Albert Einstein published his paper on general relativity, the geometric theory of gravity [1]. General relativity (GR) states that the force of gravity is associated with the curving/warping of spacetime. GR has become the current description of gravity in modern physics. Unfortunately, GR theory suffers from two fatal flaws: (1) as an abstract (non-physical) form of mathematics, geometry is incapable of interacting with any physical force (e.g., gravity); and (2) spacetime is a mathematical fiction.

General Relativity

General relativity presumes that the force of gravity is associated with a geometric distortion of four-dimensional spacetime by massive objects. The more mass that produces gravity in a body, the more distortion allegedly results. This presumed distortion changes the trajectories of objects moving through space and even the paths of light as they pass close by massive objects. Supposedly, massive objects bend the space around them, causing other objects to deviate from the straight lines they otherwise would have followed [2].

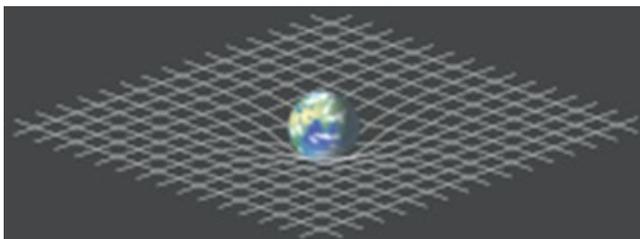


Figure 1: Hypothetical Fabric of Spacetime

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

Spacetime Myth

Spacetime is a mathematical model that supposedly fuses the three dimensions of physical space and the abstract (non-physical) 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 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 possi-

bly be real. To believe in spacetime is to believe in at least one direction to which one cannot point.

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

Disproof of General Relativity

Although general relativity is the accepted definition of gravitation in mainstream physics, this fanciful theory is fatally flawed. Spacetime is the geometric illusion that can be expressed 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.

Geometry is the mathematics which describes the properties and relations of points, lines, and surfaces – as well as the relative location of objects. 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.

Einstein versus Newton

Isaac Newton predicted that a light beam passing close by the Sun would bend slightly towards it by 0.93 arcseconds; however, he was not talking about gravity. Newton was an expert in optics, having written the original treatise on this subject in 1704 [4]. He knew that light bends as it passes from air (low density) into water (high density) and surmised that the same thing would happen when light passes from space through the dense photosphere surrounding the sun.

Einstein predicted that a light beam grazing by the sun would bend slightly towards it by about 1.75 arcseconds. Experimental observations from the Solar Eclipse of 1919 suggested that Einstein's prediction was closer than Newton's; and because of those measurements, Newtonian gravity was scrapped in favor of general relativity [5].

The results of the 1919 Solar Eclipse experiment were inconclusive, however. An arcsecond is one 360th of a degree, or the angle made by the hypotenuse of a right-angled triangle one inch high and 1.9 miles in length. The difference between Newton's and Einstein's predictions was only 0.82 arcseconds, which tiny variation is statistically insignificant [6].

Stephen Hawking said of the 1919 deflection results, "Their measurement had been sheer luck, or a case of knowing the result they wanted to get, not an uncommon occurrence in science" [7]. The errors in data were as large as the effect they were trying to prove, thus making the results inconclusive. There is no way to know whose prediction was more accurate, Newton's or Einstein's. Neither does it matter because Newton was talking about optics and Einstein was talking about gravity.

Conclusion

Einstein's general relativity, the geometric theory of gravity that has become the accepted definition of gravitation in modern physics, is fatally flawed. Four-dimensional spacetime is a mathematical fiction. Spacetime does not exist, does not curve, and cannot possibly interact with or be affected by gravity. Einstein mistakenly interpreted light refracting through the sun's photosphere as a gravitational effect. Light has zero mass and is thus unaffected by gravity.

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