

# Einstein's Grand Mistake

Cusack Paul TE\*

Associate Professor, Department of Mathematics, University of New Brunswick, Fredericton, NB Canada

## INTRODUCTION

Albert Einstein made a great big mistake in his theory of relativity. Although he produced a useful and historic equation in  $E=mc^2$ , and the concept of a varying space and time, his theory on relativity was wrong. Why it was so easily accepted so widely and why did it persist for so long? Einstein had made three crucial mistakes that his theory of relativity was based on.

That there was no "light medium" or aether as was it was called. Einstein was basing his theory on the fact that there was nothing that the speed of light was relative to viz the aether. The Michelson-Morley experiment of 1877 misleads physicists into believing that the earth did not pass through ether. Therefore, space must be a vacuum. This was a mistake. We now know that there is the ether which has Teflon in characteristics.

The second big mistake that Einstein based his work on was that he thought that time was undefined. We now know that time is simply Kinetic Energy, given by the formula  $KE=1/2Mv^2$  which every High School student should know. Einstein: I've completely solved the problem. My solution was to analyze the concept of time. Time cannot be absolutely defined, and there is an inseparable relation between time and the signal velocity [1].

The third mistake relied on by Einstein in forming his theory of relativity was that there is no absolute frame of reference or a "preferred coordinate system". This is false. The preferred coordinate system is a mental construct as is math and can be placed anywhere one wants. It exists at time  $t=1$  and Energy  $E=0$  - where the ln function crosses the time x-axis. Einstein "The law of nature have had and still do not have a preferential coordinate system." [1] Einstein was careful with his words in a telegram to his wife: "Dear mother, Today I have some happy news. HA Lorentz telegraphed me that the English expedition (led by Arthur Eddington) have really verified the deflection of light by the sun" What he wrote is true. The reasoning behind it was wrong.

These then are the errors that Einstein relied upon to construct his bazaar theory of relativity that every student of physics must learn to be current. An experiment was undertaken by Arthur Eddington, in 1919 whereby they travelled to view the total solar eclipse. The idea was that the star light from a nearby star would bend due to the gravitational pull of the Sun. While it was found the light did appear to bend, the mistake was in that relativity theory is not the only possible cause of the light "bending." In fact, we now

know the light passes through the holes in the Ether. In fact, the measurement is more accurate with the ether (1.67) not 1.70 than Eddington found. Unfortunately, the news papers proclaimed Einstein's Theory to have been proven. The scientific investigation was done in public view. What did Einstein say about it? "I never understood why the theory of relativity, with its concepts and problems so far removed from practical life should have met with such a lively, indeed, passionate, reception among a broad spectrum of the public." [1]

The Eddington experiment was an observational test of General Relativity, organised by the British astronomers Frank Watson Dyson and Arthur Stanley Eddington in 1919. The observations were of the total solar eclipse of 29 May 1919 and were carried out by two expeditions, one to the West African island of Principe, and the other to the Brazilian town of Sobral. The aim of the expeditions was to measure the gravitational deflection of starlight passing near the Sun. The value of this deflection had been predicted by Albert Einstein in a 1911 paper, and was one of the tests proposed for his 1915 theory of General Relativity. Following the return of the expeditions, the results were presented by Eddington to the Royal Society of London, and, after some deliberation, were accepted. Widespread newspaper coverage of the results led to worldwide fame for Einstein and his theories.

Einstein said, "I am convinced that the redshift of spectrum lines is an absolutely convincing consequence of relativity theory. If it were proved that this effect did not exist in nature, then the whole theory would have to be abandoned [1]. The red shift is supposed to imply the big bang theory of the creation of the universe. We have shown that the big bang theory is incorrect.

The Michelson-Morley experiment was an attempt to detect the existence of the luminiferous aether, a supposed medium permeating space that was thought to be the carrier of light waves. The experiment was performed between April and July 1887 by American physicists Albert A. Michelson and Edward W. Morley at what is now Case Western Reserve University in Cleveland, Ohio, and published in November of the same year. The experiment compared the speed of light in perpendicular directions in an attempt to detect the relative motion of matter through the stationary luminiferous aether ("aether wind"). The result was negative, in that Michelson and Morley found no significant difference between the speed of light in the direction of movement through the presumed aether, and the speed at

\*Correspondence to: Associate Professor, Department of Mathematics, University of New Brunswick, Fredericton, NB Canada; Email: st-michael@hotmail.com

Received: August 2, 2021; Accepted: August 16, 2021; Published: August 23, 2021

Citation: Paul CTE (2021). Einstein's Grand Mistake. *Mathematica Eterna*. 11:134. doi: 10.35248/1314-3344.21.11.134

Copyright: © 2021. Paul CTE. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited.

right angles. This result is generally considered to be the first strong evidence against the then-prevalent aether theory, as well as initiating a line of research that eventually led to special relativity, which rules out a stationary aether. Of this experiment, Einstein wrote, "If the Michelson–Morley experiment had not brought us into serious embarrassment, no one would have regarded the relativity theory as a (halfway) redemption." Michelson–Morley type experiments have been repeated many times with steadily increasing sensitivity. These include experiments from 1902 to 1905, and a series of experiments in the 1920s. More recently, in 2009, optical resonator experiments confirmed the absence of any aether wind at the 10 level. Together with the Ives–Stilwell and Kennedy–Thorndike experiments, Michelson–Morley type experiments form one of the fundamental tests of special relativity theory.

Einstein's theory of relativity led to bizarre results such as the twin paradox. If a twin left Earth and travelled at a high-speed approaching light, and returned to Earth, his twin who remained on Earth would be older than the space venturer. This defies not only common sense, but the Conservation of Energy. Principle so basic to Physics. The reason it may have been not rejected is because physicists did not understand what Einstein was getting at. "The theory is beautiful beyond comparison. However only one colleague has really been able to understand it and [use it] viz David Hilbert, a mathematician [2]. Einstein won the Nobel Prize in 1921 being nominated several times from 1911 onward. His paper on relativity appeared in 1905. The Nobel prize was given for the "Photoelectric effect" because relativity was still controversial at the time.

Einstein said that there was only one person who understood his theory on relativity and that was David Hilbert- a mathematician. No wonder! Maybe this is why the error persisted for 111 years. (Incidentally  $111 \text{ years} = 1/9 = 1/c^2 = E/c^2 = M \quad M = E = 1/t = 1/c^2$

$t = c^2 = v^2 = (1/\sqrt{2})^2 = 1/2 = t_{\text{min}}$  of the golden mean parabola.)

Ironically, Einstein said "The truth of a theory can never be proven for one never knows if future experiments will contradict its conclusions. Less modestly, he (jokingly perhaps) said, "about how he would have reacted if his general theory of relativity had not been confirmed experimentally? Then I would feel sorry for the good Lord. The theory is correct anyway."

In his humility, Einstein said, "The theory of relativity is nothing but another step in the centuries-old evolution of our science, one which preserves the relationship discovered in the past, deepening their insights and adding new ones. [3]

## CONCLUSION

In his old age, after he had been put to pasture at Princeton, he submitted a paper to an American Journal of Physics. The paper was rejected. Such a sad end for a great scientist. Einstein was a great scientist without this theory of relativity, as one writer put it. Interesting that some young physicists were stubborn in not yielding to pressure to accept Einstein's theory to their credit. Scientists should guard against accepting new ideas too quickly since the errors may last for several generations. A lot of time is wasted in universities learning the complex mathematics of relativity. It was wrong headed. It took 111 years to put physics on the right track. WE now know the Truth is that ancient civilizations such as the Babylonians and Egyptians knew more mathematical physics than did Einstein and his contemporaries.

## REFERENCES

1. Calaprice A. The New Quotable Einstein. Princeton UP 2005.
2. Cusack PTE. On Teflon Ether: Nessa J Physics. 2021.
3. Crowther JG. Six Great Scientists. Barnes & Noble Books, USA, 1995.