Dead Wrong

By John Frederick Sweeney



Abstract

An icon of 20th Century Physics, Albert Einstein in fact made many mistakes in his career but none more egregious than setting the Constant in E = MC ^2 at 2.99 x 10^{^8}, instead of the correct setting of the Constant at 3.35 x 10^{^8}. During his entire career, Einstein attempted seven times to provide a full proof for this equation, and failed each time. Moreover, although he has taken credit for discovery of the equation, in fact Henri Poincare devised the equation five years earlier than Einstein. The mistake over the value of the Constant has meant that nuclear power plants have been self – damaging since their inception, but changing the Constant value to will correct and reduce the damage.

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Introduction

Perhaps no modern – day scientist has been so vastly over – rated as Albert Einstein, a man whose entire career is based on an equation which he did not discover, and for which he could never write a correct proof, even after seven separate attempts during the course of his life.

Einstein's fame was actually based on his politics, and his supporters raised his meager discoveries into major events in the history of physics. Politics was allowed to intrude into science during the 20^{th} century, to the detriment of science and has created a burden which today's scientists must bear – to correct the egregious errors of the past, many of them based on Einstein's work.

Yet if Einstein did not discover the famous equation, he cannot take total responsibility for the consequences of the error, which have been tremendous. Newton and Poincare, and others as well, all came up with something close to the famous equation, long before Einstein came along to claim credit.

The important point is that contemporary civilization still has time to correct the egregious error, provided that we act with immediacy, across the globe. This paper corrects the mistake, in the hope that the global nuclear industry will act immediately on this information to clean itself up, and correct the errors of the past.

The Formula

From Wiki

In <u>physics</u>, **mass - energy equivalence** is the concept that the <u>mass</u> of an object or <u>system</u> is a measure of its <u>energy</u> content. For instance, adding 25 <u>kilowatt-hours</u> (90 <u>megajoules</u>) of <u>any form of energy</u> to any object increases its mass by 1 <u>microgram</u>, increasing its <u>inertia</u> and <u>weight</u> accordingly, even though no <u>matter</u> has been added.

A <u>physical system</u> has a property called energy and a corresponding property called mass; the two properties are equivalent in that they are always both present in the same (i.e. constant) proportion to one another. Mass - energy equivalence arose originally from <u>special</u> <u>relativity</u>, as developed by <u>Albert Einstein</u>, who proposed this equivalence in 1905 in one of his <u>Annus Mirabilis papers</u> entitled "Does the <u>inertia</u> of an object depend upon its energy content?"^[1] The equivalence of energy *E* and mass *m* is reliant on the <u>speed of light</u> *c* and is described by the famous equation:

 $E = mc^2$.

Thus, this mass - energy relation states that the universal proportionality factor between equivalent amounts of energy and mass is equal to the speed of light squared. This also serves to <u>convert</u> <u>units of mass</u> to <u>units of energy</u>, no matter what <u>system of</u> <u>measurement units</u> is used.

If a body is stationary, it still has some internal or intrinsic energy, called its <u>rest energy</u>. Rest mass and rest energy are equivalent and remain proportional to one another. When the body is in motion (relative to an observer), its total <u>energy</u> is greater than its rest energy. The rest mass (or rest energy) remains an important quantity in this case because it remains the same regardless of this motion, even for the extreme speeds or gravity considered in special and general relativity; thus it is also called the <u>invariant mass</u>. On the one hand, the equation $E = mc^2$ can be applied to rest mass $(m \text{ or } m_0)$ and rest energy (E_0) to show their proportionality as $E_0 = m_0c^2$.

On the other hand, it can also be applied to the total energy (E_{tot} or simply E) and total mass of a moving body. The total mass is also called the relativistic mass m_{rel} as it is not significantly greater than the rest mass until the speed approaches that of light, where special relativity should be used in order to describe the motion. Therefore, the total energy and total mass are related by $E = m_{rel}c^2$. [3]

Thus, the mass - energy relation $E = mc^2$ can be used to relate the rest energy to the rest mass, or to relate the total energy to the total mass. To instead relate the *total* energy or mass to the *rest* energy or mass, a generalization of the mass - energy relation is required: the energy - momentum relation.

 $E = mc^2$ has frequently been used as an explanation for the origin of energy in nuclear processes, but such processes can be understood as simply converting <u>nuclear potential energy</u>, without the need to invoke mass - energy equivalence. Instead, mass - energy equivalence merely indicates that the large amounts of energy released in such reactions may exhibit enough mass that the mass loss may be measured, when the released energy (and its mass) have been removed from the system.

For example, the loss of mass to an atom and a neutron, as a result of the <u>capture of the neutron</u> and the production of a gamma ray, has been used to test mass - energy equivalence to high precision, as the energy of the gamma ray may be compared with the mass defect after capture. In 2005, these were found to agree to 0.0004%, the most precise test of the equivalence of mass and energy to date. This test was performed in the <u>World Year of Physics 2005</u>, a centennial celebration of Einstein's achievements in 1905.^[4]

Einstein was not the first to propose a mass – energy relationship (see the <u>History</u> section). However, Einstein was the first scientist to propose the $E = mc^2$ formula and the first to interpret mass – energy equivalence as a fundamental principle that follows from the <u>relativistic symmetries</u> of <u>space and time</u>.

Contributors of equation $mc2_1 E =$

Before Einstein, among other physicists, Isaac Newton [1], English S. T. Preston [2] in 1875, French Poincaré [3,4] in 1900, Italian De Pretto [5] in 1903, German F. Hasenöhrl [6,7] made significant contributions in speculations and derivations of E=mc². After Einstein Planck [8] has also derived E=mc² independently. J J Thomson in 1888 is also believed to have anticipated E=mc²from Maxwell' s equations.

(i) Issac Newton (1642-1727)

The Great Sir Isaac Newton [1] has quoted "Gross bodies and light are convertible into one another...", 1704). In 1704 Newton wrote the book "Optiks". Newton also put forth Corpuscular Theory of Light (ii) S. Tolver Preston

S. Tolver Preston [2], who made predictions which are based essentially upon E=mc². Preston in his book Physics of the Ether proposed in 1875 that vast amount of energy can be produced from matter. Preston determined that one grain could lift a 100,000-ton object up to a height of 1.9 miles. This deduction yields the essence of equation E=mc².

(iii) Jules Henri Poincaré (1854-1912)Poincaré in 1900 [3,4] put forth an expression for what he called the "momentum of radiation" M_R. It is M_R = S/c^2, where S represents the flux of radiation and c is the usual velocity of light. Poincaré applied the calculation in a recoil process and reached at the conclusion in the form $mv = (E/c^2)c$. From the viewpoint of unit analysis, E/c^2 takes on the role of a "mass" number associated with radiation. It yields $E=mc^2$.

The Mistake

Vedic Physics sets the Constant in E = MC 2 at 3.35 x 10⁸.

Although disbelieved in the west, Hindu culture long ago developed nuclear power and nuclear weapons, based on the superior science of the extremely ancient past of 14,000 years ago. Evidence for a great nuclear war exists in the Mahabharata, the classic work of Hindu literature, as well as in radiation samples taken at various locations in India which compare with Hiroshima and Nagasaki.

"Nuclear plants all over the world are blasting and being damaged due to this under estimate calculation. If these nuclear reactors are made according to the (correct) calculations...then the damage may be decreased in the nuclear reactors to the level of Zero." So states the source of this information, a book about Vedic Nuclear Physics published in India.

The author leaves it to the reader to make the proper calculations in the famous formula with the new suggested value.

Conclusion

There is no time like the present to correct this egregious mistake, before the damage grows worse, and before the world experiences another nuclear disaster, such as Three Mile Island, Chernobyl or Fukushima. In the latter case, the Japanese still continues to conceal and lie to the public about the extent of the disaster, and the tragedy of Fukushima claims new victims daily.

The world should feel deeply ashamed to act as the Japanese have behaved in the wake of Fukushima, that is to say, by attempting to publicly minimize the danger while knowing that the danger to populations is indeed quite real.

Nuclear power, ushered in by Einstein, has the potential to completely destroy our civilization. We must act responsibly and use this dangerous power with extreme care. Now that we know the correct setting for the Constant, to fail to acknowledge this, and to fail to correct the Constant in the world's nuclear reactors, constitutes nothing short of a crime against humanity. Einstein was wrong, dead wrong, but we don't need to live with his egregious errors. Does 21st Century humanity have the maturity to admit its mistakes?

The time is now to take responsibility. Doing so will lead to more efficient and less dangerous nuclear energy.

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Contact

The author may be contacted at jaq 2013 at outlook dot com



Some men see things as they are and say *why*? I dream things that never were and say *why not*?

Let's dedicate ourselves to what the Greeks wrote so many years ago:

to tame the savageness of man and make gentle the life of this world.

Robert Francis Kennedy