

Translation into English: [Chapter 2 - Catalogue of Errors for Both Theories of Relativity](#)

from the German documentation of G.O. Mueller

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## K: Mass-Energy Relationship / Error No. 2

**The mass-energy relationship  $E = mc^2$  is said (1) to have been discovered by Albert Einstein in the context of the STR, and (2) only to be interpreted by relativity**

*Both claims can be easily refuted, as the critical literature has demonstrated, without contradiction. Since the treatment the mass-energy relationship in the literature is mostly fairly complex, i.e. the "speed dependency" and the "conversion" and the pre-relativistic discoveries also being treated in this connection, several standpoints have already been addressed in the accounts of Errors J 1, J 2 and K 1.*

*Ives (1952) has proven that the derivation of  $E = mc^2$  selected by Albert Einstein (1905, inertia of a body) is logically incorrect, because it is based on a circular argument that already takes the proof to be given as a prerequisite.*

*Jammer (1964, pp 190-193) reports on Ives and confirms (pp 190-191): "It is indeed the case that what the layman knows as 'the most famous mathematical formula in science' is merely the result of a 'petitio principii', i.e. a conclusion based on the assumption that the claim has already been proven."*

*The relationship between mass and energy (or: matter and energy) has, according to the corresponding statements of various authors, nothing relativistic about it: Heisenberg 1981 (initially: 1959); Galeczki / Marquard, 1997 (pp 145-158) treat the mass-energy relationship, though they begin by treating the mass-velocity relationship (pp 133-145). - Theimer (1977, pp 78-105): treats in detail (pp 84-92) the historical development: Thomson 1881, Wien 1900, Poincaré 1900 and 1904, Kaufmann 1901-1905, Hasenöhrl 1904 and 1905, Zahn and Spees 1938, Faragó and Jánossy 1957. - Gut 1981 (pp 66-90) provides a masterly and thorough study of the 6 or so different derivations together with their errors.*

Jammer, 1964 (cf. above quote) found the discovery of Albert Einstein's logical error, in his derivation of the famous formula, so embarrassing that he proceeded, immediately after the above quote (p. 191), with: "This stipulation does not, of course, diminish the importance of Einstein's contribution to the problem in the least ..." For relativists, Albert Einstein can do whatever he wants, it is always good and important.

Jammer's opening of the paragraph in question can also only be fully appreciated after reading the full text. Jammer writes: "It is a strange coincidence in the history of human reasoning that Einstein's own derivation ... was not logically flawless." In the present catalogue of errors on Albert Einstein's theories Jammer could have convinced himself that the circular argument here was no strange coincidence, but a strangely repetitive stylistic feature of both of Einstein's theories, and as such, perhaps indeed something special in "the history of human reasoning".

One cannot repeat the truth as often as the propaganda of the relativists repeatedly spreads their deceptions. The critical literature clearly proves that the mass-energy relationship  $E = mc^2$  was discovered long before Einstein and without the assumptions of his relativity. In other words, it is independent of the STR and needs, as an absolute effect, its own non-relativistic interpretation.

The energy released from nuclear fission (an atom bomb, or nuclear power stations) is no longer dependent on which observer in which inertial system organizes the nuclear fission, or on which observer in which other inertial system observes it and on how their observations differ, but only on the released forces of bonding in the atom, which escape as electromagnetic radiation, thereby introducing the speed of light  $c$

into the formula. After the fission of the atomic nuclei there is a mass defect for the residues that is also non-dependent on any observers in whatever inertial systems.

The mention of the speed of light  $c$  will certainly have contributed towards the willing and gullible acceptance of the propaganda by the broad public of specialists, because the relativists happily report everything to do with " $c$ " as being "relativistic" - as though Albert Einstein and the relativists have patented the speed of light.

For a correct evaluation of the circular argument it must be recalled that something supposedly proven by it need not automatically be incorrect - it is only not proven by the circular argument, though it may well indeed be correct if another, more correct method of proof is found for  $E = mc^2$ , repeatedly and also in the classical way.

In the context of his STR Albert Einstein never prophesied the winning of energy from atomic nuclei. Nuclear fission is the result of empirical research that developed independent of the theory of relativity. Rutherford, who achieved the first nuclear transformation, rejected the theory of relativity (cf. Theimer, 1977, p. 97).

Einstein, Albert: Ist die Trägheit eines Körpers von seinem Energiegehalt abhängig? In: Annalen der Physik. 18. 1905. pp 639-641. Reprinted in: Albert Einsteins Relativitätstheorie. Publ.: K. v. Meyenn. 1990. pp 156-159. - Corbino, O. M.: La massa dell'energia / O. M. Corbino. - In: Nuovo cimento. Anno 56. Ser. 5, Vol. 20. 1910, 2. sem., fasc. 11/12, pp 462-469. - Ives, Herbert Eugene: Derivation of the mass-energy relation. In: Journal of the Optical Society of America. 42. 1952, pp 540-543. Reprinted in: The Einstein myth and the Ives papers. 1979, pp 182-185; Ergänzungen: pp 186-187. - Jammer, Max: Der Begriff der Masse in der Physik / translated from the Engl. by Hans Hartmann. Darmstadt 1964. 248 pages. - Faragó, P. S.: Review of the experimental evidence for the law of variation of the electron mass with velocity / P. S. Faragó, L. Jánossy. In: Nuovo cimento. Ser. 10, Vol. 5. 1957, No. 6, pp 1411-1436. - Heisenberg, Werner: Physik und Philosophie. Original extract 83.-86. Tsd. Frankfurt a. M. (etc.): Ullstein, 1981. 196 pages. (Ullstein Buch. 35132.) Earlier edition 1971. - Theimer 1977, pp 78-105. - Gut, Bernardo Juan: Immanent-logische Kritik der Relativitätstheorie. Oberwil b. Zug: Kugler, 1981. 151 pages - Galeczki / Marquardt 1997, pp 133- 158.