

10.09.2024

On how the physics journal EPL (Europhysic Letters) handles requests for publication

The EPL journal is an international physics journal published bimonthly in English under the scientific responsibility of the European Physical Society, EDP Sciences, IOP Publishing and the Società Italiana di Fisica for a partnership of 17 European physical societies (the EPL Association).

Its self-description is: "EPL: A journal exploring the frontiers of physics". Its aim is, according to its own statements, to publish "short articles with new results, ideas, concepts, experimental methods and theoretical treatments."

However, if one gains insight into the work of the editorial staff, for example by applying for publication, one finds that it does not live up to these self-declared claims. With the help of the peer review process, articles that do not correspond to the officially represented standard views are rejected without giving a factual reason. This means, first of all, that new ideas and theoretical treatises are excluded from publication. The elementary errors and misconceptions in the standard concepts of physics identified by a large number of physicists cannot therefore be disseminated in the scientific community, which actively hinders the further development of physical science.

Below I will give an example of the editorial approach to an article that deals with a problem that has long been recognized as flawed by a significant number of physicists. It deals with two questions:

1. Is there the so-called "pure" energy, i.e. energy that has no mass?
2. Can mass be "converted" into energy and vice versa?

I have submitted the article reproduced below for publication on these two questions.

– *Start of the submitted work* –

14.08.2024

The postulate of so-called "pure" energy and the conversion of energy into mass

and vice versa
by Dr. Manfred Pohl

Abstract

The article shows that the claim that mass can be converted into energy and vice versa is incorrect. The reason for this false view is the claim that there is energy without mass (so-called "pure energy"). Both claims are refuted in the article. The general reason for these misinterpretations is recognized as an inadequate understanding of matter.

Main part

0. Introduction

Very often one finds publications containing two postulates which are not correct, and which can be refuted.

1. The so-called "pure" energy is postulated, which is intended to express that there is energy that has no mass.
2. It is postulated that energy can be converted into mass and vice versa

This paper will show that both postulates are incorrect.

1. Pure energy

- a) We consider the energy equation of mechanical energy:

$$E_{ges} = E_{kin} + E_{pot} = \frac{m \cdot v^2}{2} + m \cdot g \cdot h$$

In this equation, v , g and h are values other than zero, g is the acceleration due to gravity. The equation shows that the energy is always zero when the mass is zero. This means that there is no energy without mass. For the same reason, there is no mass without energy.

- b) The same statement can be obtained from the analysis of Einstein's equation of mass-energy equivalence:

$$E = m \cdot c^2$$

Here, c is a natural constant, the speed of light in a vacuum. Here, too, the energy is zero when the mass is zero and vice versa: $0 = 0 \cdot c^2$. Only when the mass is other than zero is there an energy equivalent to it: $m \neq 0 \rightarrow E \neq 0$.

Conclusion: There is no "pure", massless energy.

2. Mass-energy conversion

a) Massless energy and energy-free mass

Assuming that one could "convert" mass into energy, that would mean obtaining another entity by canceling one entity. In the specific case, that would mean that when mass is converted into energy, mass disappears, and its cancellation creates energy that does not contain mass. In the opposite case, energy disappears, and its cancellation creates mass that is free of energy. It has already been shown under 1. that both of these assumptions are wrong.

b) Conservation quantities

The assumption of a conversion process from mass into energy or vice versa is contradicted by the conservation laws of energy and mass. They state that in a closed system both the total energy and the total mass are unchangeable unless energy or mass is released to the outside or supplied from the outside. Mass and energy are conservation quantities. It follows directly from the conservation laws that energy or mass can neither come into being nor disappear, i.e. they exist forever. They also cannot be created by creating one entity from the other by canceling it out. Under this assumption, neither energy nor mass would be conserved quantities.

c) Refuting the transformation processes with a series of thoughts.

The starting point is the law of conservation of energy: In a closed system, the total energy is constant unless energy is removed from the system to the outside or energy is supplied to the system from the outside:

$$E_{ges} = const \quad (1)$$

If you divide this total energy of the system into two arbitrary parts, for example

$$E_{ges} = E + E_1 \quad (2)$$

therefore, because of (1) in this closed system

$$E + E_1 = const \quad (3)$$

We now follow the thesis that energy can be converted into mass. We apply it to the energy component E1 and convert it into the mass m:

$$E_1 \Rightarrow m \quad (4)$$

Under this assumption, the energy component E1 would no longer exist, it would have been cancelled, and the mass m would have been created in its place. If we now use assumption (4) in equation (3), we obtain as a direct consequence

$$E + m = const \quad (5)$$

Equation (5) shows that the **sum of energy and mass** is constant. This means that a larger mass contains less energy, and a smaller mass contains more.

However, according to the mass-energy equivalence, the opposite statement is obtained.

The mass-energy equivalence is

$$E = m \cdot c^2 \quad (6)$$

Here, c is the natural constant of the speed of light in vacuum. This relationship was theoretically derived by Albert Einstein in 1905 and subsequently practically proven by a large number of experimental investigations.

This means that

$$\frac{E}{m} = c^2 = const \quad (7)$$

But that means that **the ratio of energy to mass** is constant - **not the sum**. That means that an increase in mass leads to an increase in energy and vice versa.

But since expressions (1), (2) and (3) are correct in the above derivation, the error must be in expression (4), in which the "conversion" of energy into mass was postulated. **This step is not possible**. Such a process does not exist in nature. You cannot "convert" one into the other, i.e. cancel one out in favor of the other.

Conclusion: The result of equation (5) is wrong.

d) The units of measurement

Equation (5) under c) contains a sum of quantities with different units of measurement. Such a sum cannot be formed, it would have no physical content. The unit of measurement for mass is the kilogram (kg):

$$[m] = kg$$

The unit of measurement for energy is the Joule (J):

$$[E] = \frac{m \cdot kg^2}{s^2}$$

Physical categories with different units of measurement cannot be added. What would be the result of adding a kilogram to a joule? You would have to write

$$1 \text{ kg} + 1 \frac{\text{m} \cdot \text{kg}^2}{\text{s}^2} = ?$$

This "sum" cannot be explained. However, if you insert the units of measurement into the mass-energy equivalence, you get

$$\left[E = m \cdot c^2 \right]; \frac{\text{kg} \cdot \text{m}^2}{\text{s}^2} = \text{kg} \cdot \frac{\text{m}^2}{\text{s}^2}$$

The result is correct.

Conclusion:

It is impossible to "convert" energy into mass or vice versa. Both entities are two manifestations of one and the same reality, matter. One cannot appear without the other. Where there is energy, there is also mass, and where there is mass, there is also energy. This is the basic statement of mass-energy equivalence.

I see the cause of these incorrect attitudes in the rejection of the dialectical-materialistic concept of matter. The misconceptions under 1. and 2. are possible by denying that energy belongs to matter.

References

(– List of sources –)

– End of the submitted work –

The request for publication of this paper was rejected with the following letter from the editors:

Von: onbehalf@manuscriptcentral.com
An: unipohl@aol.com
Betreff: *Our decision on your article: EPL-24-100531*
Datum: 30.08.2024 – 13:11 Uhr

Dear Dr Pohl,

Re: "The postulate of so-called "pure" energy and the conversion of energy into mass" by Pohl, Manfred
Article reference: EPL-24-100531

Thank you for your submission to EPL.

To be publishable in this journal, articles must be of high quality and scientific interest, and be recognised as an important contribution to the literature.

Your Letter has been assessed and has been found not to meet these criteria. It therefore does not warrant publication in EPL and has been withdrawn from consideration.

We are sorry that we cannot respond more positively and wish you luck in publishing your article elsewhere.

Yours sincerely

Mr Kevin Desse

EPL Editorial Assistant

On behalf of:

Dr Dario Benedetti

EPL Co-Editor

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Letter reference: DSRNR01“

The appointed reviewer, Dr. Dario Benedetti, therefore assesses that the submitted text is not of high quality and is not of scientific interest, so that it cannot be recognized as an important contribution to the literature. However, he does not say how this assessment came about and on what it is based. The rejection letter does not address the content of the submitted text in a single word. It contains no statement about what is wrong with the text, nor does it state why, in his opinion, such fundamental problems of physics could not be of scientific interest. The rejection was therefore made completely superficially, it has no factual content and is therefore completely worthless.

It appears to have come about after it was deduced from the abstract that the paper addresses fundamental errors in the standard views of some physicists and announces the refutation of erroneous views. This refutation was then no longer acknowledged because the critical treatment of so-called official opinions alone is sufficient for a rejection. This phenomenon does not only characterize the journal EPL, it is the typical approach of the preponderant majority of scientific journals. All of them use the peer review process, in which appointed experts are commissioned to assess the submitted articles. They are all representatives of the mainstream views, and they do not tolerate opinions deviating from them. Often they are not familiar with the subject of the submitted paper and therefore judge without the necessary specialist knowledge. This state of the scientific press in general is described in detail in the book by the Swiss economist Prof. Dr. Matthias Binswanger "Senseless competitions – why we produce more and more nonsense". Relevant passages from this book can be read in the publication on my Internet portal

<http://hauptplatz.unipohl.de/Wissenschaft/DeadEndBigBang.htm>.

Binswanger states in his book:

"If a scientist wants to publish an article in a scientifically recognized journal, he must first submit it to the editor(s) of the journal, who are usually already established champions of their discipline. However, these editors often do not have time to take care of the day-to-day business of "their journal", and so there is also a less established managing editor who is responsible for the administrative process, who receives the manuscripts from scientists who are keen to publish and thus sets in motion the peer review process. But what exactly is meant by peer review process? He gives the submitted manuscripts to one or more professors or other recognized scientists (so-called peers) for review, who ideally work in the same field as the author of the article and should therefore be able to assess its quality." ... "As the crowning conclusion of the process, the reviewers then inform the editor in writing whether they are advocating

acceptance (very rarely), revision or rejection of the article (most often) for the relevant journal. Quite a few top journals even boast about their high rejection rates, which supposedly reflect the high quality of these journals (Fröhlich 2007, p. 338). For such journals, the rejection rates are in the order of 95 percent."

For the reasons set out above, I lodged an objection to the decision with the EPL editorial team on September 2, 2024:

"Dear Mr. Desse,

I hereby appeal against the rejection of the publication of my article "The postulate of so-called "pure" energy and the conversion of energy into mass", article reference: EPL-24-100531.

The article was not processed in accordance with the ethical rules of peer review by a scientific journal.

The article contains clear statements and clear mathematical evidence for the untenability of the claims prevailing in the standard opinion of the existence of pure, massless energy and the possibility of converting mass into energy and vice versa. This evidence was not refuted by the reviewer, Dr. Dario Benedetti, and even more, it was not even mentioned in the rejection letter. Consequently, no reasons for the rejection were brought to my attention.

The reviewer's argument that the article is not of scientific interest and should not be recognized as an important contribution to the literature is therefore incorrect because it does not take into account at all the factual content of the article. However, such an assessment cannot be made without a statement about the physical content or the mathematical refutation of the representation. The comment about the lack of quality of the article is therefore completely arbitrary; it is a subjective opinion of the reviewer.

Therefore, the decision made in the rejection letter dated August 30, 2024, letter reference DSRNR01, cannot be accepted by me without objection. I consider it necessary that it be given to me a reason based on the factual content of the article. In particular, to me, as the author, must be shown factual errors in the explanations and errors in the mathematical derivations. This is the only way to meet the ethical rules of journalistic processing of submissions.

Please review this processing method and let me know your decision, which I may have to submit to public review.

*Sincerely yours
Dr. Manfred Pohl"*

The objection was answered as follows:

*"Von: onbehalfof@manuscriptcentral.com
An: unipohl@aol.com
Betreff: Our decision on your article: EPL-24-100531
Datum: 09.09.2024 – 14:58 Uhr*

Dear Dr Pohl,

*Re: "The postulate of so-called "pure" energy and the conversion of energy into mass"
by Pohl, Manfred
Article reference: EPL-24-100531*

After a careful evaluation of your appeal, the Editor-in-Chief, Dr Richard Blythe, has come to the following conclusion:

«It is standard practice across scientific journals to decline to send out for review if, in the opinion of the Co-Editors, the manuscript does not meet the quality threshold for publication.

In agreement with the Co-Editor, I concluded that your manuscript does not meet the quality threshold to deserve to be sent out for review.

Many thanks for your understanding,

*Dr Richard Blythe
EPL Editor-in-Chief»*

The decision is final.

Yours sincerely

*Mr Kevin Desse
EPL Editorial Assistant*

On behalf of

*Dr Richard Blythe
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Letter reference: DSR12“

This letter shows that the editor-in-chief of the EPL journal, Dr. Richard Blythe, also does not use any information from the content of the paper to announce his decision. He agrees with the arbitrary decisions of the reviewer, Dr. Dario Benedetti, without further investigation and repeats his decision, which was made without any factual reference. He also does not define a quality threshold for a publication, so its argument remains an empty phrase. The self-declared aim of the journal, "the publication of short articles with new results, ideas, concepts, experimental methods and theoretical treatises", is in no way fulfilled by this approach.

The magazine reveals itself as an unquestioning agent of the mainstream views, from which deviations and criticisms are not tolerated. Articles with such content, even if they are clearly scientifically and mathematically based, are rejected with unsuitable, meaningless passages of text by the help of the reviewers' decision-making power and thus excluded from publication. This means that the journal's role as an organ for the promotion of science is not fulfilled. The journal hinders the emergence of a public discussion on controversial scientific questions in favor of maintaining incorrect standard views. This means that it is of only very limited value with regard to the further development of science.

In general, it is necessary to end the one-sided, ideologically infiltrated focus on the so-called official opinions in scientific publications and to open ourselves up to the critical opinions of a large number of scientists. To this end, the work of the reviewers

and peers must be better qualified in order to be able to distinguish better between submissions with serious, scientifically based content on the one hand and those with unscientific, speculative, religiously influenced and unrealistic content on the other hand. The current practice of rejecting any criticism of the so-called official views is causing great damage to science. In physics in particular, the current crisis can never be overcome.