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Science and Society

or

how science is ruined by charlatanry

Part 2

In the first part of the Science and Society series, I dealt with the topic of corona management, this second part is about physics.

A lack of scientific knowledge is also common practice in areas where one should not expect it, for example in physics. Here it is not politics has an inhibiting effect on science, but the administration in the scientific committees and institutions and also the statements of laypeople who do not understand the problems, but dominate the scene in large numbers.

In theoretical physics, which deals with the universe in the branch of science cosmology, in administrative circles one still believes in a big bang with subsequent expansion of the universe, which is even indoctrinated to us as accelerated. The starting point for this is a singularity, a point of infinite density of "pure" energy, which means that this energy has no mass. This is propagated in spite of all proven knowledge, including the conservation of energy, mass, and momentum, as well as the mass-energy equivalence, which prove that there is no energy without mass. There are two main reasons for this bad posture.

The first consists in the loss of the dialectic-materialistic concept of matter, which has been progressively dismantled over the past three decades. Terms are used incorrectly for this, so that material entities, such as energy, are not counted as matter. In various publications, mass is referred as a "property" of matter and not as a form of representation of matter. On the other hand, non-material categories such as space, time, force and others are stylized as material objects, and terms such as movement, expansion, curvature, compression, heating and others are applied to them for which there is no reference at all. With all these representations, the matter, i.e. the research object of physics, is permanently misdescribed, and so purposeful research is no longer guaranteed. Various people already claim today that there is no need for a concept of matter in physics. As a result of this loss, fundamental knowledge is lost. So one does not assume that matter is an eternally existing category that can neither arise nor disappear. It is still assumed that matter once came into being, so one is looking for a non-existing begin of the universe. Furthermore, one firmly assumes that there can be energy without mass, so-called "pure" energy, so that the above mentioned singularity of infinite energy density can expand. This is presented in this way because, despite the proven equivalence of mass and energy, energy is not considered to belong to matter and can therefore exist without mass. If represented correctly, one finds out that there could not have been a singularity because it could not have expanded due to the infinite mass density with the consequence of infinite internal gravitation.

The second is the misinterpretation of the redshift in the radiation spectra of distant cosmic objects discovered by Edwin Hubble (1889-1953) in 1929. They are interpreted as the result of the Doppler effect of the radiation from the objects, which are said to be moving away from the observer. Hubble had already rejected this view in 1930. In no way, however, is the Lambert-Beer absorption law included in the calculation, to which all radiation is subject when traversing space. Due to the law of absorption, the red shift is now proportional to the distance of the objects and not, as is incorrectly represented, to their escape velocity. When presented correctly, one comes to the

compelling conclusion that there is neither an accelerated nor a linear expansion of the universe. Observations of the movement of 338 galaxies by Halton Arp (1927 to 2013), summarized in his "Atlas of peculiar galaxies", clearly refute the expansion hypothesis. However, such findings are deliberately ignored, because if they were to be recognized one would have to drop the big bang hypothesis, which is still treated as an axiom that cannot be questioned.

As the crowning glory of unscientific knowledge, they even go so far as to claim that the accelerated expansion has been “observed”. A Nobel Prize in Physics was even awarded for this in 2011.

The truly serious physicists have long known that this doctrine is based on a misinterpretation of the redshift of the spectra of distant objects. But people stick to it, even though calculations show that 70% of the energy required for this movement is missing. In any other science, a model with such gross mismatches would be discarded. Not so in the cosmology. Here one compensates this error by the completely speculative postulate of a "dark energy" that does not exist. The postulate was created in 1998 by Michael S. Turner (born 1949).

Incidentally, the so-called Olbers paradox still haunting in physics, is also based on the failure to calculate the propagation of radiation according to the law of absorption. It is therefore not a paradox but a simple miscalculation.

There are two other substantial mistakes that can be traced back to the lack of a clear concept of matter.

The first is the explanation of a possibility of "converting" mass into energy and energy into mass. However, these are processes that even an attentive high school student can recognize as impossible. Transforming one entity into another with a different unit of measure, that is, with a different natural constitution, is not possible. This knowledge does not require any deeper physical knowledge, it is an elementary logic. If it were possible, it would also have to be possible to sum up the two, i.e. it would have to be possible to add them up. If you could convert *kg* into *J* or vice-versa, you should also be able to form the sum *1 kg + 1 J*. However, this is complete nonsense. In the same way you could, for example, convert *kWh* into m^2 or m^3 into €. Finally, one would have to be able to define how much *1 kWh + 1* m^2 is. Unfortunately, such nonsense is sometimes taken seriously. You can't add coffee and cake, and you can't convert coffee into cake either. You can't add bread and butter together, just like you can't turn bread into butter. Imagine you are asked to calculate the sum of the four chairs in your kitchen and the two chickens in the pot on the table. You must have a problem there. Everyone has it, nobody can solve it - except for a few experts, who then quickly convert the chairs into chickens. Now seriously again. The misconception of a mass-energy conversion also incorrectly explains the mass defect that occurs in particle processes. One reads formulations such as “mass disappears in particle processes” and “one cannot say where to”. One also reads sentences such as "when a particle collides with its antiparticle, both are annihilated in energy", or "when the Hiroshima bomb was dropped, *700 mg* of mass was converted into energy". All this has nothing to do with physics.

The second is the entrenched belief in the existence of gravitational waves, which cannot exist. Millions are still wasted on researching them. Gravity is a force, so it's a non-material category, it's a property of mass. Assuming movement from a force is nonsense, because only matter moves in space and time. Applying the terms motion or propagation to properties of matter has no physical content. It's as meaningless as asking about the sound of a tomato or the color of a diatonic scale. But even

"observation results" are made public about this misconception, which can certainly only be a wrong interpretation of measurements, in the worst case also a deception of the public. There was also a Nobel Prize in Physics for this in 2017. One refers to Albert Einstein, who still postulated gravitational waves in 1916, but was no longer sure shortly afterwards. In the years that followed, after many years of intensive research work together with other scientists (Leopold Infeld, Marcel Großmann, Banesh Hoffmann, Max Born, Nathan Rosen and several others), he proved in 1938 that they cannot exist. This can be gleaned from a 2016 research by Galina Weinstein in Albert Einstein's notes. But this is denied in today's physics or deliberately ignored.

I omit in this essay such hair-raising omissions as the "inflationary phase of the expansion of the universe" or "primordial nucleosynthesis" or the talk of the "origin" of the laws of nature or the "existence of parallel universes" or "multiverses" (Max Tegmark). I also refrain from explanations about an end of the universe or the resurrection of all life in the so-called "omega point" (Frank Tipler). Such performances do not belong in science and certainly not in physics. The interested reader can read more about this in other articles on my internet portal or in my books.

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