

Refutation of the false and true Einsteinism. Of Charles L. R. E. Menges.

The recent conclusion of delivery *Gekrckes* Handbook of Physical Optics, Vol. II, contains on page 966 an essay written by *S. Mohorovičić*, under the heading "A new and natural explanation of what the *Michelson-Morley* experiment should be." This would allow "all optical phenomena in moving bodies form a uniform point of view to explain ... without any new hypothesis taken to help"

In contradiction with the quoted is that which follows, namely: "On the surface occurs due to the movement through the ether at rest, the aberration appearance, but this is identical to a fictional refraction (refraction), it is as if the light beam from the medium, where the light propagates with the velocity c , enters into another medium, where the propagation velocity of light is $c + v$. It follows the apparent refractive index

$$n = c/(c+v) \quad (1)$$

and from the *Fresnel* relation is apparently the new partially entrained speed of light

$$c_2 = c + v \cdot (n^2 - 1)/n^2 \quad (2)$$

"or, with respect to (1) with sufficient accuracy:

$$c_2 = c - 2 \cdot v^2/c - v^3/c^2 = c(1 - 2 \cdot v^2/c^2) \quad (3)$$

The aberration to accept them as such "identical" with the refraction that is any formula of refractive index on the aberration and apply for this actually true, I can only watch it as a new and incorrect hypothesis. If the claimed identity is valid, but should wherever the refractive index, n , its value will be used to (1). But at the point where the *Fresnel* relation c/n , since c is in (2) and (3) set, which amendment may be considered but only as fancy or new hypothesis.

Emphasis should, however, be that my result is what matters here, not to mention the following well-founded views on hypotheses mandatory.

For the period, which in the famous *Michelson-Morley* experiment, the light wave in the direction of the earth takes to the semi-transparent mirror G after a non-transparent mirror M_2 and again to get back there in the continuation of

the article quoted above:

$$T_2 + T'_2 = 2D \cdot c(1 - 2v^2/c^2) / [c^2(1 - 2v^2/c^2)^2 - v^2] \quad (4)$$

Subsequently thereto, says: "The entire optical path $GM_2'G'$ during this period is very nearly

$$D_2 = 2D \cdot (1 - 2v^2/c^2) / (1 - 3v^2/c^2) = 2D \cdot (1 + v^2/c^2) \quad (5)$$

This formula should be that calculated one in a new way, is identical to that calculated by *Michelson* and *Lorentz* for D_2 !

Since the cited amounts to a familiar formula, so it cannot be seen to what should constitute the "new" statement. This could only arise in connection with what is relative to the light beam between G and the other mirror M_1 said in the article and cited here.

"By contrast, *Michelson* set for the entire optical path GM_1G' the relation

$$D_1 = 2D \cdot \sqrt{(1 + v^2/c^2)} = 2D \cdot (1 + v^2/2c^2) \quad (6)$$

is derived and *Lorentz* has shown, that due to the reflection on the moving mirror M_1 this way any longer to $D \cdot v^2/c^2$, i.e., it is:

$$D_1 = D \cdot \sqrt{[1 + (2v/c)^2]} + D = 2D \cdot (1 + v^2/c^2) \quad (7)$$

and it is immediate:

$$D_2 - D_1 = 0 \quad (8)$$

and the displacement of the interference fringes

$$\Delta = 0 \quad (9)$$

i.e., the *Michelson* experiment must necessarily give a negative result. Thus, an explanation of this experiment within the *Fresnel* theory is fully functioning."

As mentioned above, the *Lorentz* gave in (5) given value of D_2 earlier. Therefore, it is striking that the "new" statement must have been known since the most obvious way, when the *Lorentz* had quoted him in the ascribed formula (7) really existed. The incorrect formula (7) is not *Lorentz*¹⁾, it was constructed only in the *Mohorovičić* essay

¹⁾ The formulas of *Lorentz* can be found for example in his book, "The Theory of Electrons," pp. 193, 194.

by incorrect application of a given *Lorentz* correction, the reference is to an old formula of *Michelson*. In the quoted, it was incorrectly attributed *Michelson*, formula (6) is actually the formula of *Lorentz*, which contains the specified correction of this already. In that, in the essay of *Mohorovičić* the adjustment is again applied to the formula (6), (7) contains the correction twice and is thus incorrect.

The alleged "new and natural explanation" I can see only as a co-clustering of a confused and false construct. This result is now confirmed dramatically in a simple way:

The formula (5), presented as derived from (4), has arisen from a trivial calculation error. A close approximation follows from (4) correctly:

$$D_2 = c(T_2 - T'_2) = 2D \cdot c^2 (1 - 2 \cdot v^2/c^2) / [c^2 (1 - 2 \cdot v^2/c^2)^2 - v^2] \quad (10)$$

$$= 2D \cdot (1 - 2 \cdot v^2/c^2) / (1 - 5 \cdot v^2/c^2) = 2D(1 + 3 \cdot v^2/c^2)$$

instead of (5).

After that follows, supposing that everything would be in the top *Mohorovičić* perfectly true that the correct statement in accordance with (4), (10) and (7) yields: $D_2 - D_1 = 4D \cdot v^2/c^2$. Thus, the difference would be instead of zero as the alleged "explanation" if they were correct result, would have more on that in just the opposite direction than four times after the *Lorentz* calculation!

This is true up to this point treated the first word in the title of this essay. Why there is not *Einsteinism* and relativity? Because I see that the *Einstein* theory of relativity cannot be recognized as a proper theory.

The *Einsteinism*, or wrongly, the so-called theory of relativity, is based on the assumption that the speed of light is not what the natural relativity applies. However, I defend the natural, true relativity, which is consistent with no exception for the light ¹⁾. Because of this true relativity, consistently applied, together with the equally consistent application of the concept of physical force here in the refractive index, I have the optical effect in transparent solids motion the formula:

$$\Delta = Dv v/c^2 \cdot (n - 1 + v \cdot dn/dv) \quad (11)$$

derived ²⁾.

Previously it was possible that, for the optics of moving bodies to be valid, derive not with the experimental results matching formula without the help of the entrainment coefficient, or other such, not to the otherwise generally applicable principles of science suitable new hypothesis, which was therefore held indispensably necessary. Any new hypothesis in the derivation of my formula (11) is not introduced, but is distinguished by the experiments of *P. Zeeman* ³⁾ and confirmed with great accuracy. It is proved the correctness of my deduction, which readily gives the refutation of *Einsteinism*.

At my disposal, is that outside of the body moving with velocity v relatively $c - v$ for this but the speed of light, so we have the natural composition of velocities. Assuming, however - according to the previous incorrect interpretation of the *Fresnel* relation - that the light is relatively outside but has to be the moving body but the same speed as relative and not to the moving body, and neglected one that, because of the Doppler effect, the refractive index during the movement of the force in the rest differ, one obtains after some transformation from the well-known *Fresnel* formula of my relation

$$c_2 = c/n + (1 - 1/n^2)v. \quad (12)$$

The more than century-old mystery that has been seen in this equation is now solved. The puzzle has its only apparent reason of inaccurate, inconsistent consideration of the true relativity, and in the incorrect value that was assumed for the refractive index. You can see here on my in noted work ¹⁾ pp. 29-48.

The theories, like those of *Einstein*, who want to take the mystery and explain than actually correct, so do not agree with the true outcome of the experiment but with the wrong interpretation of the same, so the theories are fundamentally wrong.

For the same reason is also because of the coefficient of entrainment to the kinematics of objection raised unfounded ⁴⁾.

As mentioned above, from my right formula using some incorrect assumptions, the *Fresnel* relation (12) was obtained. From this can be reversed but the correct interpretation of test results will not, of course, since you made an incorrect formula cannot see what is required to rectify them, and this is visible only from my properly derived formula.

Particularly important is that the results are *Fizeau-Zeeman* derived from pure laboratory experiments. This phenomenon allows the results of great accuracy and reliability to be achieved, and that's what this particular babbles significant, independent of cosmic and astronomical circumstances that are inaccessible to direct inspection. This gives the experiment its importance as a experimentum crucis, as *Einstein* has rightly stressed repeatedly. The correct interpretation of actual results are of fundamental importance to all other experiments ⁵⁾. This character as a experimentum crucis is of course no matter what the experiment proves or disproves. Just opposite to what was previously assumed, is the correct interpretation of the experiments, the decisive refutation of *Einsteinism*.

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Ch. Menges.

¹⁾ Charles L. R. E. Menges, New Faraday-Maxwellian views, with supplement, on the propagation of light (*Gauthier-Villars* and Co., Paris, 1924).

²⁾ Charles L. R. E. Menges, C. R., Paris **175**-574, 1922.

³⁾ P. Zeeman, Verslagen Akademi. Amsterdam **21**, 245, 1914; **24**, 18; **27**, 1453, 1915; **29**, 1252, 1920.

⁴⁾ Charles L. R. E. Menges, On Kinematics, Phil. Mag. (6) **49**, 579, 1925.

⁵⁾ Charles L. R. E. Menges, On the true signification of *Fizeau-Zeeman's* experiments, Phil. Mag. (7) **1**, 1198, 1926; On *Einstein's* theory of relativity, Science (N. S.) **63**, 427, 1926.