

Atomic Clocks Dependent on the Ether Wind

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ABSTRACT

This article is analyzing the frequency stability of atomic clocks.

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Background

Atomic clocks are regarded to have a high precision to such an extent, that they are used as a proof of the concept dilation of time, that is a part of the theory of relativity. It is therefore of interest to analyse the behaviour of these clocks.

Critical aspects regarding the atomic clocks in the GPS system have earlier been given by an expert regarding GPS, Ronald Hatch, in an article called “Those scandalous clocks” [1].

Bound Electron’s Behaviour

Bound electrons move with the speed c in relation to the kernel, and we assume an ether wind, v , (also in relation to the kernel) to be falling inside the electron’s orbiting plane. This means that electron motion related to the ether is changing between $c + v$ and $c - v$, and this change follows a sine function of time. Since the effective value of a sine function is $\frac{1}{2}$, we find orbiting frequency (or inverse orbiting time) proportional to $(1 - v^2/2c^2)$, [not $(1 - v^2/c^2)$ as we would get if we had an alternation between $c + v$ and $c - v$]. (The case with an ether wind transverse to the orbiting plane is not regarded here. However, this case also is in a need of consideration).

We have found a clock frequency caused by a mechanism inside the clocks and being in proportion to

$$1 - v^2/2c^2$$

The theory of relativity states a clock frequency caused by the magical concept dilation of time and being proportional to

$$\sqrt{(1 - v^2/c^2)}$$

Since $v \ll c$ we find that these two equations are predicting approximately equally. We can also see that these relations can be applied to general relativity as well, if we use the escape velocity instead of gravity potential.

Ether

We have assumed an existing ether with the state of motion, v , (ether wind) and thereby been able to explain the behavior of atomic clocks by mechanisms inside the clocks, and these mechanisms are based on well-known classical concepts. This indicates that the concept ‘ether’ is important in physics, and also indicates that the absurd concept ‘time dilation’ is not needed. Instead, by reintroducing the ether concept we can avoid Einstein’s special, as well as general, theories of relativity.

Discussion

The theory of special relativity emanates from a failed tests in 1887 by Michelson and Morley in order to find a second order Sagnac effect and confirm the existence of the ether. These tests were interpreted in error. In 1913 Sagnac demonstrated that Sagnac effect of first order is detectable and possible to unite with the ether model. Therefore, Michelson and Morley’s tests no longer were motivated, and they should therefore have been abolished together with the theory of special relativity, that they had caused.

The theory of general relativity emanates from a tradition since Newton of regarding gravity as an attracting force. Instead, gravity emerges inside matter as an effect of the ether. This fact explains, why we observe no aberration in gravity. Therefore, gravity could not be explained, when the ether concept was abolished.

A lot of failures regarding ether wind detection resulted in the denial of the ether concept. But this denial is bad logic, since failures provide no new knowledge and proves nothing. So, no existence cannot be proved by failures, and a not existent concept cannot provide evidences to that fact. Therefore, we find that the ‘ether’ is an important concept needed for explaining light propagation (Sagnac effect) and also the emergence of gravity.

Conclusion

The ether concept has been a very difficult problem for scientists ever since Newton’s days. Therefore, Einstein’s mythology gave scientists an excuse to turn their backs to a very difficult problem and abolish the ether concept. This idea had the effect that we got a century without an ether – and with slow progress in physics.

So, we can conclude that Einstein's physics has been devastating to science.

Reference

1. Ronald RH (2004) Those scandalous clocks. GPS Solutions 8: 67-73. https://www.naturalphilosophy.org/pdf/abstracts/abstracts_5789.pdf

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