

The Quest for Truth: 2) The Michelson & Morley Experiment

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- What is the meaning of the Michelson & Morley Experiment?
- What did it prove?
- What is the danger of null-result experiments?

The null result of the Michelson & Morley Experiment is allegedly confirming the interpretation of the Special Relativity Theory, in which a length contraction is supposed to occur, which allegedly compensates the motion of the aether in order to get a null result.

In the former section, we have however found that the Special Relativity Theory is issued from a thought experiment that uses light to communicate. The communication by light can indeed never be the cause of an alteration of the standard ruler, the standard mass and the standard clock in an Euclid space. Moreover, that theory is self-contradicting because every inertial reference frame can mutually say that the other is moving and that it gets these alterations mutually.

Let us analyze the meaning of a null result of an experiment in general. If the entire physical context of an experiment is known and understood, a null result can make sense, because it is fully understood what happened. The null result is only a point of a global curve that can be obtained by changing the different parameters of the well-known system.

Was the entire physical context of the Michelson & Morley known? No! Nothing was known. There was only a lot of speculations about the behavior of aether, if it exists. Moreover, there were no multiple tests with changing parameters, allowing to get a curve, of which the null result is only one point.

Hence, a null result proves nothing at all if the physical context of the experiment is not physically known! In the present case, it is not known what the behavior of aether is, and even it is not known if aether really exists.

When such a meaningless null result is interpreted inside a novel theory, of which all the physical components are not known, then we get a vicious circle, and that theory is absolutely not supported by that meaningless null result!

Such circular reasoning has been used over and over by Sophists in the past, but it doesn't mean a thing.

Hence, the result of the Michelson & Morley Experiment is meaningless, and the alleged compliance of the supposed behavior of aether with the special relativity theory has been fabricated around this meaningless null result!