Translation into English: Chapter 2 - Catalogue of Errors for Both Theories of Relativity

from the German documentation of G.O. Mueller

"On the Absolute Magnitude of the Special Theory of Relativity - A Documentary Thought Experiment on 95 Years of Criticism (1908-2003) with Proof of 3789 Critical Works" - Text Version 2.1 - June 2004 http://www.ekkehard-friebe.de/kap2.pdf

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A: Ether / Error No. 1

## The Michelson-Morley Experiment (MME) 1881/87 is said to have proven the non-existence of the ether

This claim is given by all authors as one of the foundations of the STR. It is incorrect, since the MME was intended to provide proof of the drift against a stationary ether. Anyone accepting the supposed null result of the MME can only conclude that the ether is not stationary. For this reason, some authors have supposed the "taking along" of the ether as a means of explaining the alleged null result. The proof of the non-existence of the ether by the MME was not at all possible in the first place.

As regards the conducting of the original MMEs of 1881 and 1887, the essential circumstances are still not reported in the trade journals and propaganda writings of relativists up to the present day. Even many critics believe the propaganda of the relativists. In 1977, for example, Theimer (p. 16) recognized as uncontested: "The experiment was repeated at various times of the year, also during phases of opposite motion of the earth vis-à-vis the sun, but the result remained zero." None of this is true.

For the first time in 1993 (!) Collins/Pinch (Golem, cited from the 2nd ed. 1998), pp 29-43, presented a **critical** analysis of the course of the 1887 experiment. The experiment ought to have been carried out under 6 conditions (p. 35). A whole 6 series of measurements were undertaken, and these at 12 o'clock on the 8th, 9th and 11th of July and at 6 p.m. on the 8th, 9th and 12th of July. Due to the disappointing readings, however, the experimenters discontinued the experiment. **Not carried out** were:

- (1) repetitions at various times of the year;
- (2) repetition in a transparent building;
- (3) repetition high above sea level.

Precisely these measurements at various times of the year, neglected in 1887, were later undertaken by D. C. Miller, who furthermore satisfied the requirements of the transparent building and high altitude on the Mt. Wilson Observatory, obtaining clearly positive values for running-time differences and the expected, notable seasonal fluctuations. Where a periodic fluctuation can be clearly recognized, the readings are relevant - and as regards their magnitudes, these were considerable.

In other words, the complete implementation of the MME of 1887 is just a famous fairy tale of the science of physics, and the subsequent successful implementation and exposure of the fairy tale by D. C. Miller is no wonder at all. On the basis of 1887, Albert Einstein supposedly revolutionized, in 1905, our conceptions of space and time.

The imperfection even of the instrument of 1887, the discontinuation of the experiment by the experimenters and the failure to take note of both of these circumstances are serious errors of physical research and a main reason for the - around 1905 still tragic - loss of course by H. A. Lorentz and Albert Einstein, which was later deliberately expanded to a system.

Claims of non-existence is epistemologically the most problematic undertakings. Basically speaking, they cannot be proven at all by a single experimental result. They can, however, be fundamentally refuted by a single experiment, something that has happened repeatedly during the subsequent period.

The incomplete implementation of the MME of 1887 was not, of course, revealed by relativists, and incidentally not by physicists either, but - a nice point - by the science sociologists Collins and Pinch. Physics is too difficult for physicists, if sociology fails to help them critically. Both sociologists were subsequently summoned by the powers that be in relativity in the USA to appear before an indictment symposium, referring to which they report, in the 2nd ed. of 1998, that they had nothing to retract.

The MME of 1881 made use, for the first time, of the interferometer conceived by Michelson. The construction problems were so great that this first experiment was unable to provide useful results. The repetition in 1887, with an improved instrument, brought such a small running-time difference for the beams of light travelling in different directions that Michelson himself, in disappointment, spoke of a null result, although even the improved instrument could not give a definitive result. For this reason further interferometer experiments were conducted during the following 40 years, these showing irrefutably positive results.

Remarkably, Michelson's own evaluation as a "null result" has not only been taken up by relativists, but also by critics right up to the present day. The suppression of the further experimental results - those of Michelson via Sagnac up to Dayton C. Miller - in the perception of the general public is one of the greatest achievements of relativity.

Michelson, Albert Abraham: On the Relative Motion of the Earth and the Luminiferous Ether. In: American Journal of Science. Ser. 3, Vol. 34. 1887, November, pp 333-345. Also in: Philosophical Magazine. Ser. 5, Vol. 24. 1887, December, pp 449-463. Reprint in: Swenson 1972. - Swenson, Loyd S., Jr.: The Ethereal Aether. A History of the Michelson-Morley-Miller Aether-Drift Experiments, 1880-1930. 1972. 361 pages. - Collins, Harry M.: The Golem: What You Should Know About Science / Harry Collins, Trevor Pinch. Cambridge: Univ. Pr., 1993. 164 pages. cf. 2nd ed. 1998. German edition: Der Golem der Forschung. Wie unsere Wissenschaft die Natur erfindet. 1999.