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Relativity

[The Meaning of the Michelson-Morley Experiment](#)

H. Vic Dannon

Abstract: The Null result of the Michelson-Morley experiment, that ruled out the existence of an immobile Aether, is unexpected only in terms of Galilean Physics.

In Special Relativity, that Null result is fully expected, and does not rule out the existence of any Aether.

Since textbooks present the Michelson Morley experiment only in terms of Galilean Physics, its meaning is distorted, and misleading.

In particular, the Michelson-Morley Experiment cannot, and does not rule out an immobile Aether, or any Aether.

Furthermore, the Michelson Morley experiment is not an anomaly explained away by Lorentz contraction, but the most solid confirmation for Relativistic Kinematics.

Precision tests of the experiment validate further the formulas of velocity transformations in Special Relativity, and confirm Special Relativity.