

Contributed Talk

Splinter Education

THE MICHELSON-MORLEY EXPERIMENT IN A PROPER  
REPRESENTATION

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In the literature, including Wikipedia, the Michelson-Morley experiment is interpreted with the Lorentz contraction. Einstein had repeatedly described this misinterpretation as artificial and unnatural. The contradiction between the experimental "zero result" and the mechanical (inadequate) velocity equation had a serious effect on the "negative" result (or experiment). Since 1905, however, the unity of mechanics and electrodynamics, and thus a uniform law for the addition of mechanical and electrodynamic velocities, has been known by Einstein's special theory of relativity. It is shown below that the application of the relativistic velocity addition is readily in accordance with the experimental "zero result", i.e., without imagination of an ether and without incomprehensible body deformations. The incorrect interpretation by the Lorentz contraction is to be replaced by the correct speed addition.