

17a-P2-2

光速度は可変であり相対性理論は物理上の完全な誤り VII

The light velocity is variable

and the relativity theory is complete mistake on physics VII

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球面波の伝搬は同一時間同一距離を進む, よって表 1 より S 座標系垂直水平距離は等しい

$$2\sqrt{l^2 + \left(\frac{1}{2}vt\right)^2} = 2l + (vt_1 - vt_2) \quad (1)$$

ピタゴラスの定理より

$$2\sqrt{l^2 + \left(\frac{1}{2}vt\right)^2} \times \sin \theta = 2l \quad (2)$$

である. 表 1 の S, S' 座標系の水平方向 2 式を等号で結ぶ.

$$\frac{2l + (vt_1 - vt_2)}{c} = \frac{2lc}{c^2 - v^2} \quad (3)$$

ローレンツ変換は $\sin \theta$ と同値である.
よって

$$2l + (vt_1 - vt_2) = \frac{2l}{\sin^2 \theta} \quad (4)$$

である. (1),(2)式より

$$2\sqrt{l^2 + \left(\frac{1}{2}vt\right)^2} \times \sin \theta = 2l \neq \frac{2l}{\sin \theta} \quad (5)$$

となる. この数式は相対性理論の完全破綻をしめす.

結論

Michelson-Morley の実験は「光速度可変」を示す.
相対性理論は物理上存在しない.

Table 1: Michelson-Morley(M-M)'s formulas and coordinates

Wave	S	S'	Particle	S	S'
Vertical	$\frac{2\sqrt{l^2 + \left(\frac{1}{2}vt\right)^2}}{c}$	$\frac{2l}{\sqrt{c^2 - v^2}}$	Vertical	$\frac{2\sqrt{l^2 + \left(\frac{1}{2}vt\right)^2}}{\sqrt{c^2 + v^2}}$	$\frac{2l}{c}$
Horizontal	1) $\frac{2l + (vt_1 - vt_2)}{c}$	2) $\frac{2lc}{c^2 - v^2}$	Horizontal	3) $\frac{2lc - v^2t}{c^2 - v^2}$	$\frac{2l}{c}$

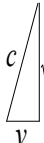
S, S' coordinate systems are translational motion each other.

Light wave propagates S coordinate system and is measured S' coordinate system.

Fictitious particle (=Particle) has a velocity c and mass zero introduce S' coordinate system.

c is light velocity. v is the earth revolution velocity. Two l are distances from observation point to vertical and horizontal mirrors.

$$1) \frac{l + vt_1}{c} + \frac{l - vt_2}{c} = \frac{2l + (vt_1 - vt_2)}{c} \quad 3) \frac{l + \frac{1}{2}vt}{c + v} + \frac{l - \frac{1}{2}vt}{c - v} = \frac{2lc - v^2t}{c^2 - v^2}$$

$$2) \frac{l}{c - v} + \frac{l}{c + v} = \frac{2lc}{c^2 - v^2}$$


$$\sin \theta = \frac{\sqrt{c^2 - v^2}}{c}$$

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

Table 2: Numerical values test to M-M's formulas

Wave	$\frac{2\sqrt{l^2 + \left(\frac{1}{2}vt\right)^2}}{c}$	6.928	$\frac{2l}{\sqrt{c^2 - v^2}}$	6.928
	$\frac{2l + (vt_1 - vt_2)}{c}$	6.928	$\frac{2lc}{c^2 - v^2}$	6.928
Particle	$\frac{2\sqrt{l^2 + \left(\frac{1}{2}vt\right)^2}}{\sqrt{c^2 + v^2}}$	6.0	$\frac{2l}{c}$	6.0
	$\frac{2lc - v^2t}{c^2 - v^2}$	6.0	$\frac{2l}{c}$	6.0

Using numerical values $l = 24.0, c = 8.0, v = 4.0, l' = l \sin \theta$ Lorentz transformation $= \sin \theta$

$$\sin \theta = 0.866 \quad \frac{2l}{\sqrt{c^2 - v^2}} \sin \theta = 6.0 \quad \frac{2lc}{c^2 - v^2} \sin^2 \theta = 6.0$$