

The "Relativistic Proof" of Fermat's Last Theorem

Charles Keyser

04/20/2024\

Motivation

$$c = a + b$$

$$c^n = (a + b)^n = [a^n + b^n] + [f(a, b, n)] \quad (\text{Binomial Expansion})$$

$$c^n = [a^n + b^n] \leftrightarrow [f(a, b, n)] = 0$$

$$[f(a, b, n)] \neq 0$$

$$c^n \neq [a^n + b^n] \quad \text{QED}$$

The Continuity Equation

$$(ct') > 0, (ct) > 0, \forall v_i t_i : (v_i t_i) \geq 0 \quad (\text{i.e., each element } (v_i t_i) \geq 0)$$

(Note: this proof is also correct for $(v_i t_j), i = 1, 2, \dots, n, j = 1, 2, \dots, m$) which includes

$$i = j, (i, j) = 1, 2, \dots, n$$

$$(ct') = (ct) + (v_i t_j) = (ct) + \sum_{i=1}^n (v_i t_j), i = 1, 2, \dots, (n) \quad \text{using Einstein summation convention}$$

Note that all existing elements $v_i t_i + 0 = v_i t_i$ are continuous (no gaps).

$$(ct') = (ct) \leftrightarrow (v_i t_j) = 0$$

Proof of Fermat's Last Theorem

To Prove:

$$(ct')^n \neq (ct)^n + (v_i t_j)^n$$

Proof

$$(ct')^n = [(ct) + (vt_i)]^n = [(ct)^n + (vt_i)^n] + [f((ct), (vt_i), n)] \quad (\text{Multinomial Expansion})$$

$$(ct')^n = (ct)^n + (vt_j)^n \leftrightarrow f((ct), (vt_i), n) = 0$$

$$f((ct), (vt_i), n) \neq 0$$

$$(ct')^n \neq (ct)^n + (vt_i)^n \quad \text{QED}$$

Note that $(ct')^2 \neq (ct)^2 + (vt_i)^2$ and in particular,

$$(ct') = (ct) + (vt')$$

$$(ct')^2 = [(ct) + (vt')]^2 = [(ct)^2 + (vt')^2] + [2(ct)(vt')]$$

$$\pi(ct')^2 = \pi[(ct) + (vt')]^2 = \pi[(ct)^2 + (vt')^2] + [(ct)\{2\pi(vt')\}]$$

Where $\{2\pi(vt')\}$ is a circumference ("loop") and $\pi(ct')^2$ is the surface area of a cylinder ("wire")

Finally, any system based on the Pythagorean system is wrong: $(ct')^2 \neq (ct)^2 + (vt')^2$ (Pythagorean Theorem)

$$\psi = ct + i(vt')$$

$$\psi = ct - i(vt')$$

$$\psi\psi^* = [(ct)^2 + (vt')^2] + (ct)(vt') - (ct)(vt')$$

$$\psi\psi^* = [(ct)^2 + (vt')^2] \neq [(ct)^2 + (vt')^2] + [2(ct)(vt')]$$

However,

$$\# := (ct') = (ct) + (vt')$$

$$\#^2 = (ct')^2 = [(ct)^2 + (vt')^2] + [2(ct)(vt')] = [\psi\psi^*] + [2(ct)(vt')]$$

