

Refutation of set of cycles in classical real Minkowski plane

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From: en.wikipedia.org/wiki/Minkowski_plane

$$P := (R \cup \{\infty\})^2 = R^2 \cup (\{\infty\} \times R) \cup (R \times \{\infty\}) \cup \{(\infty, \infty)\}, \infty \notin R, \text{ the set of points,} \quad (1.1)$$

$$Z := \{ \{(x,y) \in R^2 | y = ax + b\} \cup \{(\infty, \infty)\} | a, b \in R, a \neq 0\} \cup \{ \{(x,y) \in R^2 | y = ax - b + c, x \neq b\} \cup \{(b, \infty), (\infty, c)\} | a, b, c \in R, a \neq 0\}, \text{ the set of cycles.} \quad (2.1)$$

We assume the apparatus and method of Meth8/VL4. The designated *proof* value is \top tautologous. Repeating fragments of the truth table results are 16-values as row-major, and presented horizontally.

LET $r\ s\ t\ u\ v\ x\ y : R\ a\ b\ \infty\ c\ x\ y;$
 \sim Not; $\&$ And, $\times, \cup, ", "$; $>$ Imply, $|$, greater than; $<$ Not Imply, lesser than, $\in =$ Equivalent to;
 $@$ Not Equivalent to, \neq ; $+$ Or; $-$ Not Or; $\sim(p > q)$ ($p \leq q$); $\sim(p < q)$ $p \notin q$;
 $\%$ possibility, existential for one or some; $\#$ necessity, universal for all;
 $(s@ s)$ logical 00; $(\%s > \#s) - (\%s > \#s)$ numeric zero as one minus one.

P, the set of points:

$$\sim(u < r) > (((r \& u) \& (r \& u)) = (((r \& r) \& (u \& r)) \& ((r \& u) \& (u \& u))))); \quad \text{TTTT TTTT TTTT TTTT} \quad (1.2)$$

Eq.1.2 as rendered is tautologous. This means the set of points in the classical real Minkowski plane are confirmed.

Z, the set of cycles, using logical 00:

$$(((x \& y) < (r \& r)) > (y = ((s \& x) + t))) \& (((s \& t) < r) \& \sim(s = (s@ s))) > (u \& u)) \& (((x \& y) < (r \& r)) \& ((y = ((s \setminus (x - t)) + v)) \& \sim(x = t))) \& (((s \& t) \& v) < r) \& \sim(s = (s@ s))) > ((t \& u) \& (u \& v)))); \quad \text{FFFF FFFF FFFF FFFF} \quad (2.2.1)$$

Z, the set of cycles, using numeric zero as one minus one:

$$(((x \& y) < (r \& r)) > (y = ((s \& x) + t))) \& (((s \& t) < r) \& \sim(s = ((\%s > \#s) - (\%s > \#s)))) > (u \& u)) \& (((x \& y) < (r \& r)) \& ((y = ((s \setminus (x - t)) + v)) \& \sim(x = t))) \& (((s \& t) \& v) < r) \& \sim(s = ((\%s > \#s) - (\%s > \#s)))) > ((t \& u) \& (u \& v)))); \quad \text{FFFF FFFF FFFF FFFF; FFFF FFFF TTTT FFFF} \quad (2.2.2)$$

Eqs. 2.2.1 and 2.2.2 are *not* tautologous. This means the set of cycles in the classical real Minkowski plane are refuted.

Remark: Eq. 2.2.2 as rendered numerically provides a finer level of detail in proof results than Eq. 2.2.1 logically. Hence Eq. 2.2.2 shows *not* contradictory, but obviously also *not* tautologous.

What follows is that basing quantum theory on the set of cycles in the classical real Minkowski plane is suspicious.