

ZF Law of Excluded Middle on Infinite sets (LEMI)

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From: Banks, A. "A new axiom for ZFC set theory that results in a problem". vixra.org/abs/1709.0391

Law of excluded middle on infinite sets (LEMI):
" $\exists n \neg P(n) \vee \forall n P(n)$ " (1.1)

LET: q n ; p P ; $\% \exists$; $\# \forall$; $\sim \neg$; $+ \vee$.

$(\%q \& \sim(p \& q)) + (\#q \& (p \& q))$; CCTN CCTN CCTN CCTN (1.2)

Because

$\sim(p \& q) = (p \setminus q)$; TTTT TTTT TTTT TTTT (1.3)

we rewrite Eq. 1.2 by distributing the quantified operators as:

$((\%q \& p) \setminus (\%q \& q)) + ((\#q \& p) \& (\#q \& q))$; TTTN TTTN TTTN TTTN (1.4)

Eqs. 1.2 and 1.4 as rendered are *not* tautologous. Hence Meth8/VL4 finds LEMI suspicious.