Refutation of Cantor's continuum hypothesis

We assume the method and apparatus of Meth8/VŁ4 with Tautology as the designated *proof* value, F as contradiction, N as truthity (non-contingency), and C as falsity (contingency). The 16-valued truth table is row-major and horizontal.

From: Ragusa, R. (2018). The function f(x)=C and the continuum hypothesis, an algebraic proof of the CH. vixra.org/pdf/1806.0030v1.pdf

The continuum hypothesis was ... based on the possibility that infinite sets come in different sizes ... that the set of real numbers is a larger infinity than the set of natural numbers. That is to say the set of real numbers has a cardinal number greater than the cardinal number of the set of natural numbers; (1.1.0)
and ... that no set exists with a cardinal number between the two. (1.2.0)

LET: ~ Not; & And; > Imply, greater than; < Not Imply, less than;
% possible, for one or some; # necessary, for all or every;
p, q, r, s: cardinal number (index), natural number, real number, set;
p<(s&#q) cardinal number (index) is less than all natural numbers .

We rephrase Eq. 1.1.0 as:

"Possibly a cardinal number (index), within the set of all natural numbers, for the set of real numbers is greater than a cardinal number (index), within the set of all natural numbers, for the set of natural numbers." (1.1.1)

(%(p<(s&#q))&(s&r))>((p<(s&#q))&(s&q)) ; TTTT TTTT TTTT NFNT (1.1.2)

We rephrase Eq. 1.2.0 as:

"No cardinal number, within the set of all natural numbers, exists for a set greater than the cardinal number for the set of natural numbers and less than the cardinal number for the set of real numbers." (1.2.1)

((p<(s&#q))&(s&q))<(~(p<(s&#q))<(%(p<(s&#q))&(s&r))) ;
FFFF FFFF FFFC FFFC (1.2.2)

The argument is Eqs. (1.1.0 and 1.2.0), meaning Eqs. (1.1.1 and 1.2.1). (2.1)

((%(p<(s&#q))&(s&r))>((p<(s&#q))&(s&q))) & (((p<(s&#q))&(s&q))
<(~(p<(s&#q))<(%(p<(s&#q))&(s&r)))) ; FFFF FFFF FFFC FFFC (2.2)

Remark: Eqs. 1.2.2 and 2.2 bear the same result table.

Eq. 2.2 as rendered is *not* tautologous, and nearly contrariety (with two C), hence refuting the continuum hypothesis.