

Refutation of the root in partition Jensen polynomials for hyperbolicity

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Abstract: The root in partition Jensen polynomials for hyperbolicity is *not* tautologous. Hence its use to prove the Riemann hypothesis is denied. These conjectures form a *non* tautologous fragment of the universal logic $\forall\exists\Delta$.

We assume the method and apparatus of Meth8/ $\forall\exists\Delta$ 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, or repeating fragments of 128-tables, sometimes with table counts, for more variables. (See ersatz-systems.com.)

LET \sim Not, \neg ; + Or, \vee , \cup , \sqcup ; - Not Or; & And, \wedge , \cap , \square , $;$; \ Not And;
 $>$ Imply, greater than, \rightarrow , \Rightarrow , \mapsto , $>$, \supset , \Rightarrow ; $<$ Not Imply, less than, \in , $<$, \subset , \neq , \neq , \ll , \lesssim ;
 $=$ Equivalent, \equiv , $:=$, \Leftrightarrow , \leftrightarrow , $\hat{=}$, \approx , \simeq ; @ Not Equivalent, \neq ;
 $\%$ possibility, for one or some, \exists , \diamond , **M**; # necessity, for every or all, \forall , \square , **L**;
 $(z=z)$ **T** as tautology, **T**, ordinal 3; $(z@z)$ **F** as contradiction, \emptyset , Null, \perp , zero;
 $(\%z\>\#z)$ **N** as non-contingency, Δ , ordinal 1; $(\%z\<\#z)$ **C** as contingency, ∇ , ordinal 2;
 $\sim(y < x)$ ($x \leq y$), ($x \subseteq y$), ($x \sqsubseteq y$); $(A=B)$ ($A\sim B$).
 Note for clarity, we usually distribute quantifiers onto each designated variable.

From: Jensen-Poly program for the Riemann hypothesis and related problems.
people.oregonstate.edu/~petschec/ONTD/Talk1.pdf

Slide 96: Partition Jensen polynomials are hyperbolic if and only if $(p(n+1)(n+1)) > (p(n)p(n+2))$.
 (1.1)

LET p, q : p, n .

$$(p\&((q+(\%r\>\#r))\&(q+(\%r\>\#r)))) > ((p\&q)\&(p\&(q+(\%r\<\#r)))) ;$$

TCTT TCTT TCTT TCTT

(1.2)

Eq. 1.2 as rendered is *not* tautologous. This refutes the conjecture of Jensen-Poly for Riemann hypothesis.