

Abstract Submitted  
for the MAR13 Meeting of  
The American Physical Society

**DIGIT-PHYSICS:** Digits Are Bosons Are Quanta Because (On Average) Quanta and Bosons Are and Always Were Digits!!!; Contra Wigner, “On the Unreasonable Effectiveness of *Physics in Mathematics!*”; Do Physics-NECESSARY-Averages Equal or VS. DIGITS-Log-LawS(!!!) Averages??? HERMON CHERNOFF, EDWARD CARL-LUDWIG SIEGEL, MARVIN ANTONOFF, ADOLPH SMITH, FREDERIC YOUNG, FUZZYICS = CATEGORYICS = PRAGMATYICS (“Son of ‘TRIZ’”)/CATEGORY-SEMANTICS COGNITION — Zurek(1981-…): “Not Its But Bits”; Newcomb(1881)!!!: “Not Bits But Its”!!! DIGITS?: “For a Very Long Time Giving Us All The FINGER”!!!: “**DIGIT-PHYSICS**”: Contra Wigner, “On the Unreasonable Effectiveness of *Physics in Mathematics!*”; A Surprise in Theoretical/Experimental Physics and/or Ostensibly Pure-Mathematics:  $\langle \text{PHYSICS: Q.-M./S.M.} \rangle = ??? = \langle \text{DIGITS} \rangle - \text{LAW(S)}$ . DIGITS’ ostensibly “pure-mathematics” Newcomb[Am.J.Math.4,39(1881)]-Weyl[Math.Ann.,77,313 (**16**)]-Benford[J.Am.Phil Soc,78,115(**38**)] empirical inter-digit (*on-average*) (DIGITS are not random-variables!!!) *statistical*-correlations “(NeWBe)-Logarithmic-Law” ( $\langle P \rangle \equiv \langle \omega \rangle$ )( $d$ ) =  $\log_{10} \left( +1 + \frac{1}{d} \right)$ ;  $d \in \mathbb{Z}$ )  $\in [0!, 9]; 0 \leq (\langle P \rangle \equiv \omega) \notin \mathbb{Z} \leq 1$  Hill [Proc. AMS 123, 887( 95)] vs, Jech[PSU/Brown!-(95)] root-cause ultimate-origin proof: scale-invariance = base-invariance = units-invariance proof)[N.Y.T. (8/4/’98); Am. Sci. (7-8/’98); New Sci. (7/10/’99)] sequential **INVERSION** to only **Bose-Einstein** quantum-statistics (“*Spin(E)less-BoZos*” (“SoB”’s))  $\frac{1}{10^{<P>} - 1} = d(\langle P \rangle)$ , and Taylor/power-series-< ( $\langle P \rangle \equiv \langle \omega \rangle$ ) ><< 1)- **EXPANSION** to  $d((\langle P \rangle \equiv \langle \omega \rangle) = \frac{1}{10^{<P>\equiv\omega} - 1} \cong \frac{1}{[+1+(\langle P \rangle \equiv \langle \omega \rangle) + ...] - 1} \cong \frac{1}{\langle P \rangle \equiv \langle \omega \rangle} \approx \frac{\text{"1"}}{\langle P \rangle \equiv \langle \omega \rangle} \text{ **Hyperbolicity** "noise"} \frac{1}{1.000...}$

Hermon Chernoff  
FUZZYICS = CATEGORYICS = PRAGMATYICS (“Son of ‘TRIZ’”)/CATEGORY-SEMANTICS COGNITIVE

Date submitted: 29 Nov 2012

Electronic form version 1.4