DILATION PRINCIPLES

"Do the anomalies exist at Pd)50:50? Do the variant rates continue to infinity, or are the data sets outliers?"

The core answer to such questions is quite fundamental. I call the <u>first principle</u> - Bracket Dilation. Regardless of the binomial rates - (p:q) zero to one-half, the string of set counts or the distance between the (p set) and the (q set) grows quite large and respectively quite small, but the binary partition, or Return count, is intrinsically one to one. Both binomial sets stack for the zero distance Returns. Both the p and the q stacks (set strings) thus become longer than what might be expected by a simple divisional rate or count. The variant factor moves explicitly to (n+1) at limit zero, thus the (1/2) derivative in the original expressions. Consider the progressive set of data (pdf files) for the decreasing rate pReturns, and increasing rate q{1,2}, q{1,2,3}, etc.. Most significantly, notice the rate oscillations (highlighted) which are producing a consistent non-smooth <u>stone in a pond</u> logarithmic <u>waveform</u> along the terms. The low terms are in excess (hi/lo rates), the high terms are too long. Data collection is seen to link as an <u>observable</u> criteria. In other words, the variant rate pattern is amassed uniformly for each of the varied rate (Return) sets. (term 1 hi, term 2 lo, etc.)

The (n+1) math is the type of thing that a statistician might recognize as obvious, but the physics implications are much more interesting. When you look at the <u>second principle</u> - n+Sum graphic you will see two columns of identical values for both sets of 65,000 (50:50 rate) events. As I've discussed, look at the uniform non-smooth logarithmic wave patterns defined (highlighted) by the variant rates, in both columns. An infinite number of 65,000 event *data columns* will match the variant wave pattern for each large data set because of this complementary effect to principle one. The variant rates are not outliers.

The <u>third principle</u> - Circle:Cycloid Dilation also is matrixed at the limit zero (1 to 2) variant factor. Consider the time-trace (x:y) identity in the Halo graph. The variant waveform field is literally reaching across negative time. A mirrored principle to positive time:space dilation appears to exist. See the Halo graph (page 31) in the Probability Variance Theory manuscript. Light speed slows time in a moving self-contained system. Overall, this displaces the system *forward across time*. Simple mixing motion produces permutable variant rate outcomes. For a circulating random system, links are produced literally *backwards across time*.

The *waveform harmonics* are obvious in the data. The *consistent* term rate oscillations are producing amplitude and an expanding wavelength. This appears to stem from the effect of the inherent set principle for Bracket Dilation. Is there a ubiquitous macro-quantum (n-factor) variant link producing the unexpected (non-smooth logarithmic) *waveform* in random probabilistic phenomenon? Is this in response to the natural conflict in the mean stack length and the permutable zero term - Bracket stack dilation?

Consider the deBroglie formula defining (nano) "wave:particle" duality: (nL=2piR). If the principle quantum number (n+1) is proportional to energy, consider the Halo graph "time-trace" identity. The vertical axis identifies fractional, "spacial displacement" arcs in the (macro) circular randomizing system (2piR/n). The horizontal axis identifies a one to one "time displacement" correspondence with definable "Return" regularity. The variant nodal locations represent a standing wave harmonic energy state - a function of wavelength across negative time. An apparent correspondence linking "wave:particle" duality and "time:space" dilation exists. {(P)n shells:(P)n sets} The next step . . .

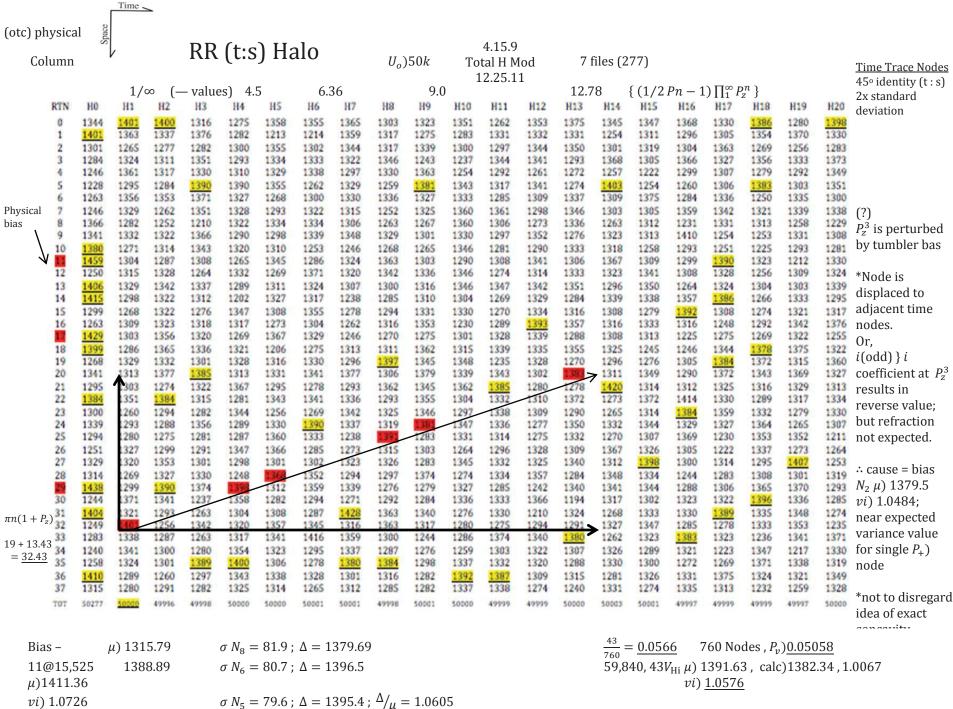
produces wareform

stone in (expanding 2)



Bracket Dilation 1.0632 (1-27)1.0645 57 58 313 ~ 59 5 93 56 1.0620 71 1009 40 19 294 > 60 1281 80 1 29 100. 9 20.3 40 . 2847 41317 715 11134 213 3797 52 1006 20 272 9 86 3856 (TIS fud) 23984 10410 632 20269 3598 1712 400 24.506/1485 1611 10259 7428 2870 1432 906 = 16.5 ele/wt 61,005 pele/3856 sets = 15.82 ele/set \$\diamondex 15; 1.92 blt; 2.04 sh 41189012 65,123 clc (2012) sh ~ 135,000 exts 7 32.37 ele/sh; 15.79 2123,43/6kt

65kert 65kert 50:50 p:9 Multiple Set (130,000 evt) (Return) Term (Sum n+) Variance (130,000 evt) (Brackets)
sh/(1007)~506 (1005)~500 (2012)~505 inv.
1 4549 1 517 4096 ~.506 B445 1 8073 (.511) (-372) * Over all rate is invariant
2 2044~503 1987~496 4031~4042 (.500) Consecutive 65K data variant match
3 976 > .518 944 > .532 1920 > 2122 (.525)
4 524 ~ 500 574 1.534 1098 1 1024 (517) P(0x) 2+ (1)=50
5 263 ~ .503 254 ~ .507 517 ~ 507 (.505)
6 134 1.515 114 >.538 248 > 259 (.511) 9(x) To) 15,802
T 58 7.540 69 1.519 127 > 156 (.510)
8-19 68 64 132 16,183
8416. 8102 16,518 Low Term (2,3,4) Perturbation
sh (1007)~757 (1005)~.752 (2012)~.755 inv.
1 4728 ~ 753 4527 ~ 749 9255 ~ 3068 (-751) (-51) 9 (2) 707
2 1190 1.767 1163 1.767 2353 1 715 (.767)
3 786 1.792 263 ~. 743 549 1 166 (.768) 1 269 p(dx) 3+ (3/4)=.150
4 54 > .720 73 1 .802 127 1 39 (.765)
5 15 > .714 11 > .611 26 > 13 (.667) 16,330 M3+; 8.11/sh; 1.33 ele/6/4
6 6 1 1.0 4 > .571 10 1 3 (.769) ; 6.12 6k+ /sh
$\frac{7}{8} - \frac{3}{100} - \frac{3}{100} = \frac{3}{1$
$\frac{3}{8} - \frac{3}{100} + \frac{3}{1$
6279 6044 12,323 gfack (Bracket Dilation)
1. (1007) or (1000) or (2012) a 877 inv. pdx) To) 1011
5h > 100/12 01/ (1005)2.01/ (2012)12.01/
1 3/80 ~ . 875 31/6 ~ . 873 6296 ~ 907(874) 7 /2.26) (>49)
2 401 1.885 407 1.898 808 1 99 (.892) T 1/2056D(1-12) pldx) 4+ (7/8) = .875 3 48 1 923 44 1.957 92 1 6 (.939) T 1/287.46D
3 48 - 923 44 - 957 92 - 6 (-7371) /287.402
4 3 > . 750 2 1.0 5 > 1 (.853) (bracket dilation) 5 1 1 10 - 1 1013 8220 M4+ : 4.09 /sh ; 1.14 ele/644
3638 3569 1202
sh (1007) ~ 936 (1005) ~ 938 (2012) ~ 937 inv.
1 1793 ~ 936 1813 ~ 936 3606 ~ 246 (937) (>84)
2 115 1 .943 118 1 .956 233 1 12 (.951) - 167.5(5h)(154) p(dx) 5+ (15/6)=9375
$\frac{3}{5} > .857 = 1.0 10 > 1 (917) + 2012(6h) 4106 1/5+ 2.04/5h; 1.07/6k+ 1.09 1/5h$
11011
1914 3850



2 times (variant) standard deviation = 79.39

 $*\pi_n = \frac{1}{2}Pn = 19$

 $2 \times \sigma = 2 \times 39.694$