

Abstract Submitted
for the SHOCK11 Meeting of
The American Physical Society

SHOCKS-“COMPLICATEDNESS” Impulse-Jerk (I-J): [a(t)];[m(t)] DEVIATIONS FROM/V.S. ”(so MIScalled) ‘Complexity’ as UTTER-SIMPLICITY!!!” (“SMCIUS!!!”): SHOCKS Burst Acoustic-Emission(BAE) “COMPLICATEDNESS”-MEASURE(S) FREDERICK YOUNG, EDWARD SIEGEL, failure-PREVENTION-associates(fPa)/THERMALLOY-TECHNOLOGY(TAT)/TATL — (so MIScalled) “complexity” associated BOTH [SCALE-Invarience Symmetry-RESTORING] AND $X(w) \sim (F-D-thm.) \sim P(\omega) \sim "1"/\omega \sim "1"/\omega^{1.000\dots}$ ”pink” Zipf-law Archimedes-HYPERBOLICITY INEVITABILITY BAE power-spectrum power-law decay algebraicity (or at least ”red” Pareto-law $X(\omega) \sim (F.-D.-thm.) \sim P(\omega) \sim 1/\omega^{(0<\#\neq 1.000\dots)}$). Their INTERCONNECT-ION? Simple-calculus [SCALE-Invariance Symmetry-RESTORING(S-I S-R)] LOGARITHM-function derivative: $d \ln(\omega) / d\omega =$ hence: $d[S-I S-R](\omega) / d\omega =$; via Noether-theorem continuous-symmetries relation to conservation-laws is: $[d[\{\text{inter-scale 4-current 4-divergence}\}] / d\omega = \sum_{\mu} \partial^{\mu} J_{\mu} = 0](\omega) = 1/.$ Hence (so MIScalled) ”complexity” is inter-scale information-conservation(nano to meso to macro)[in amazing exact agreement with Anderson-Mandell-Selz[PhD, FAU(91); Fractals of Brain/Mind, G. Stamov ed.(94)]; experimental-psychology!!!], i.e. “SMCIUS!!!” VS. SHOCKS-“COMPLICATEDNESS” NON: $"1"/\omega$ Zipf/(Pareto?); power-law; algebraicity; universality power-spectrum inverse-transform of time-series of shock’s impulse-jerk(I-J)

Edward Siegel

Date submitted: 30 Mar 2011

Electronic form version 1.4