

Abstract Submitted
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**Algorithmic-
Reducibility = Renormalization-Group Fixed-Points; "Noise"-Induced
Phase-Transitions (NITs) to Accelerate Algorithmics ("NIT-Picking")
Replacing CRUTCHES!!!: Gauss Modular/Clock-Arithmetic Con-
gruences = Signal X Noise PRODUCTS. . J. SIEGEL, EDWARD
CARL-LUDWIG SIEGEL, FUZZYICS=CATEGORYICS(SON OF TRIZ) —
Cook-Levin computational-"complexity"(C-C) algorithmic-equivalence reduction-
theorem reducibility equivalence to renormalization-(semi)-group phase-transitions
critical-phenomena statistical-physics universality-classes fixed-points, is exploited
with Gauss modular/clock-arithmetic/model congruences = signal X noise
PRODUCT reinterpretation. Siegel-Baez FUZZYICS=CATEGORYICS(SON of
"TRIZ"): Category-Semantics(C-S) tabular list-format truth-table matrix ana-
lytics predicts and implements "noise"-induced phase-transitions (NITs) to ac-
celerate versus to decelerate Harel [Algorithmics(1987)]-Sipser[Intro. Theory
Computation(1997) algorithmic C-C: "NIT-picking" to optimize optimization-
problems optimally(OOPO). Versus iso-"noise" power-spectrum quantitative-only
amplitude/magnitude-only variation stochastic-resonance, this "NIT-picking" is
"noise" power-spectrum QUALitative-type variation via quantitative critical-
exponents variation. Computer-"science" algorithmic C-C models: Turing-machine,
finite-state-models/automata, are identified as early-days once-workable but NOW
ONLY LIMITING CRUTCHES IMPEDING latter-days new-insights!!!**

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FUZZYICS=CATEGORYICS(SON OF TRIZ)

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