Quantum Alphabet of Matter Language

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I. Abstract

For the first time, quantum physics was interpreted as a system of information communication, combining calculations and measurements in the framework of differential geometry and the inverse topology of an oscillating 137 polyhedron. As a result, only the functional relationships of the two transcendental numbers PI and E with three unique integers A, R, B were necessary and sufficient for the analytical determination of basic quantum units with practically unlimited accuracy 1/10 ^ 64:

A = 137 (integer of Sommerfeld),
R = 105456978 (integer of Dirac),
B = 602214183 (Avogadro's integer).

The key to quantum computations is the squared sum of arithmetical, geometrical, harmonic and rms: SMS [PI…E] = [Sqrt((PI^2+E^2)/2+(PI+E)/2+Sqrt(PI*E)+2*PI*E/(PI+E)]^2 = [136.9938985020083593] that very close to 137 = A.

Four matrix equations describe the inverse geometry of simultaneously pulsating and rotating polyhedron:
Relative inverse eccentricity of Sommerfeld
[A] = (100*([R]-1)/2-E)/(1+Sqrt(2*PI*E/100)).
Relative inverse radius of Dirac
[R] = 1+2/100*(E+[A]*(1+Sqrt(2*PI*E/100))).
Relative inverse perimeter of Planck [P] = 2*PI*[R].
Relative density of perimeters of Newton [G] = [P]*(1+[A]).

Six matrix equations describe dynamics of three-dimensional wave fronts motion:
Relative velocity [V] = [R]^64*10^7.
Relative energy [W] = 1+[V]^2.
Relative amplitude displacement [MM] = 12-[A]/10.
Relative phase displacement [KB] = Cos [MM]-Sin [MM].
Relative information entropy [NA] = {Sqrt(8*PI*E/(8*PI*E+A^2))/(1+2*[A]/1000) +5/10^8}/10.
Relative inverse information entropy [DA] =1/[NA]/100.

Ten scaling units coordinate binary [0...1], quantum binary [0.00000000>...1.11111111>], decimal [0...10], quantum decimal [0,00000000>...9.99999999>], alpha [0...137] and quantum natural [0…SMS] computations:

Integral rotational speed of Maxwell
C = (R/10^8+4*PI*C/10^18)^64*10^7 = [299792457.86759134].
Integral of Sommerfeld
A1 = 1/A = Sum{729927/10^(8*N) = [0.0072992700729927].
Inverse integral of Sommerfeld
AS = 1/100/Sum{[A+(A-100) *N]/10^(3*N+2)} = [0.00729].
Fine eccentricity of Feynman AF = 1000/Integer{1000*Sqrt(A^2+PI^2) = [0.0072973525205056].
Integral of Avogadro
BS = Sum{B/10^(3*N+11)} = [0.00602817].
Entropy limit of Avogadro
NB = B/(1+4*PI/10^8)/10^11 = [0.0060221410732354].
Background temperature limit of Kelvin
K = E+AS+BS = [2.7315999984590452].
Displacement factor of Wien
X = Root{X*E^X/(E^X-1) = 5} = [4.9651142317442763].

The functional relations of PI and E generate thirteen basic "consonant" of quantum alphabet:

Upper parabolic limit of eccentricity A4 =.
(PI*E/100)^2+(1/A-(PI*E/100)^2) = 0.0073189621138002.
Upper hyperbolic limit of eccentricity AH =
1/(16*PI*E) = 0.0073187289405399.
Upper elliptic limit of eccentricity A(NB) =.
0.0073131309589000.
Upper logarithmic limit of eccentricity AL =.
1/(Ln(E)+59*Ln(10)) = 0.0073071361524362.

Hyperbolic symmetry point of eccentricity A1 =.
1/A = 0.0072992700729927.
Biquadratic symmetry point of eccentricity AF =
0.0072973525205056.
Parabolic symmetry point of eccentricity A0 =.
(PI*E/100)^2 = 0.0072927060593902.
Qubit symmetry point of eccentricity AS =
1/100/(1.111111111111>)^3 = 0.0072900000000000.

Upper limit of nuclear radius RC =
R/10^8+4*PI*C/10^18 = 1.0545697837673031.
Upper median of nuclear radius RE =
R/10^8+1/E/10^8 = 1.0545697836787944.
Lower median of nuclear radius RA =
R/10^8+1/(E+AS)/10^8 = 1.0545697836787944.
Lower limit of nuclear radius RK =
R/10^8+1/(E+AS+BS)/10^8 = 1.0545697836608581.

Lower point of eccentricity AX = 5/X-1 = 0.0070261763632109.

Medians of “consonants” generate "vowels" of the quantum alphabet:
Background (‘relic”) temperature TBG = [2.72525432756].
Vibrational tempo T = [2.99792456086] *10^+8.
Translational velocity V = [2.99792456976] *10^+8.
Relative molar mass MR = [0.011999277750].
Boltzmann constant KB = [1.38064845023] *10^-23.
Avogadro constant NA = [6.02214105620] *10^+23.
Atomic mass constant DA = [1.66053898549] *10^-29.
Planck constant PP = [6.62607001111] *10^-34.
Elementary charge Q = [1.60217661502] *10^-19.
Newtonian gravitational constant G = [6.67405289685] *10^-11

II. Conclusion

The quantum alphabet combines binary (bit), natural (nat), decimal (dit) and alpha (alt) computational systems in the framework of unified non-commutative mathematics.

Natural computing creates an absolute metric system and mutually coordinates classical thermodynamics, electrodynamics, chromodynamics and gravidynamics with special and general theory of relativity.

All calculated fundamental constants of quantum physics are mutually consistent, more accurate than recommended by CODATA, and can be used as an exact base for the new SI-2019.

III. References

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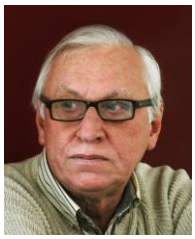
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