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P-NP Complete Problem and Theory of Relativity and Its Application

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Abstract

The concept of abstraction point group is put forward, and it is defined that point group is an infinite combination of infinite elements (value, function, space, prime, big data). It has continuous and discontinuous, uniform and non-uniform, symmetrical and asymmetrical, stochastic and uncertain, sparse and non-sparse, and discrete state sets and entangled state sets. It consists of arbitrary high-power regularization polynomials. Based on the principle of relativity, it establishes a dimensionless quantum logarithm equation, which has three normative invariances and level limits of unity, reciprocity, and isomorphism. Its polynomial isomorphism length is a span of computeable time $\{2\}^{KN}$. That is, it is proved that the NP=P complete problem and the B-H (Bemanh-Hartmanis) conjecture are established. Application example: Statistical calculation of discrete states and mathematical analysis of entangled states {NP} are all arithmetic reduction operations of the linear equation {P}.

Key words polynomial: point group, computing time, relativistic structure (circle logarithm), discrete statistics, entanglement analysis

1. Introduction

Human needs for computing power are limitless. In the study of mathematical combinatorial optimization, various calculation methods are generated. What is a good algorithm? In 1965 J Edmonds proposed an algorithm that computes time as an input length function with a polynomial as the upper bound. Why is it a polynomial? Any associated or unrelated calculation element can form a polynomial by combining sets. In 1971, Steven Cocker said: It has been found that all complete polynomial non-deterministic problems can be transformed into a class of logical operation problems called satisfiability problems [1].

In 1975 Bemanh-Hartmanis conjectured that there is a pair of G(•) and F(•) reciprocal. If the proof is true, it is all polynomial time, with polynomial time isomorphism.

In 1983, Chinese mathematician Xu Lizhi said in the "Selected Lectures in Mathematical Methodology": The main point of the calculus polynomial is the continuity of regularization [2]. If someone can very usefully introduce some very important relationship structure S, it is very useful to introduce it with G(•)

With F (•) inversion of the ability, we can make important contributions [3].

P = NP complete problem proof requirements: any uncertainty polynomial NP belongs to P, not equal to P, reduction P, can calculate the time span $\{2\}^{KN}$. The difficulty lies in the "infinity" [4].

This paper proposes the concept of the infinite set and infinite combination of elements in a point group, forms an arbitrary-power polynomial equation, and combines with the principle of relativity to establish a “base-circle logarithm with relatively variable round functions at each level, resulting in an abstract dimensionless Quantum logarithm power equation." Relativity structure (circular logarithm). Prove the limits of the three canonical invariances and hierarchies of its unity, reciprocity, and isomorphism, with a computable map and a computable time length spanned by {2} KN. The Bemanh-Hartmanis conjecture satisfies the complete problem of P=NP. Application example: Statistical calculation of discrete states and mathematical analysis of entangled states {NP} are all arithmetic reduction operations of the linear equation {P}.

2, the basic definition

Definition 1: Define point-state groups: Define the point-state group is an infinite combination of infinite elements (including values, functions, spaces, prime numbers, big data) with: continuous and discontinuous, uniform and uneven, symmetrical and asymmetric, random and Uncertainty, sparseness, and non-sparseness have two characteristics: discrete state sets and entangled state sets, which form an arbitrary high-power regularization polynomial.

Special: Traditional calculus (including dynamics) arbitrary (N) order value sign transformed to polynomial calculus power function:

There are: differential power equations:

$$\partial^{(N)}f(x^S)/\partial t^{(N)} = \partial^{(N-1)}f(x^S)/\partial t^{(N-1)}+\partial^{(N-2)}f(x^S)/\partial t^{(N-2)}+\cdots$$
$$+\partial^{(N-p)}(x^S)/\partial t^{(N-p)}+\cdots+\partial^{(N-q)}f(x^S)/\partial t^{(N-q)}$$
$$= \{x\}^{K(Z\pm S-N\pm 0)/t}+\{x\}^{K(Z\pm S-N\pm 1)/t}+\cdots+\{x\}^{K(Z\pm S-N\pm p)/t}+\cdots+\{x\}^{K(Z\pm S-N\pm q)/t}$$
$$= \{x\}^{K(Z\pm S-N)/t}; \quad (1.1)$$

Integral dynamic equation:

$$\int^{N}(D^S)dt^N = \int^{(N-1)}\{D^S\}dt^{(N-1)}+\int^{(N-2)}\{D^S\}dt^{(N-2)}+\cdots$$
$$+\int^{(N-P)}\{D^S\}dt^{(N-P)}+\cdots+\int^{(N-q)}\{D^S\}dt^{(N-q)}$$
$$= \{D\}^{K(Z\pm S+N\pm 0)/t}+\{D\}^{K(Z\pm S+N\pm 0)/t}+\cdots+\{D\}^{K(Z\pm S+N\pm 0)/t}+\cdots+\{D\}^{K(Z\pm S+N\pm 0)/t}$$
$$= \{D\}^{K(Z\pm S+N)/t}; \quad (1.2)$$

Merging (1.1) and (1.2) is written as a general formula:

$$\{R\}^Z=\{R\}^{K(Z\pm S\pm N\pm 0)/t}+\{R\}^{K(Z\pm S\pm N\pm 1)/t}+\cdots+\{R\}^{K(Z\pm S\pm N\pm p)/t}+\cdots+\{R\}^{K(Z\pm S\pm N\pm q)/t}; \quad (1.3)$$

Where: Point-state group power function Z=K(Z±S±N±P) The level of any finite structure in infinite (called path integral history record); Z infinite polynomial power function; S arbitrary finite polynomial power function; Z⩾ S ⩾ (N ~ P), (± S, ± N, ± P) are all natural numbers ± i = 1, 2, 3, ...); K = (+1, 0, -1) point group element element properties: Abbreviations: K(Z±S±N), K(Z±S±P), K(Z±S), K(Z±N), K(Z±P), (Z); (+N=∫ (N)) Integral order value, (-N=∂(N)) differential order value; (±P) polynomial combination order (increasing subtraction); where calculus (±N) and item order (±P) have the same The combined structure, ie (N~P). (/t) denotes a dynamic equation (sometimes not writing t for general expressions); {} denotes point group combinations and sets. (more than).

Definition 2: Average of point groups: The combination of elements in a point group is divided by the coefficient of the corresponding combination.

heve: $\{R_0\}^{K(Z\pm S)} = [\sum(1/C_{(Z\pm S)})^K\{R\}^k+\cdots]^{K(Z\pm S)}$

$$= (1/C_{(S\pm 0)})^K\{R\}^{K(Z\pm S\pm 0)}+(1/C_{(S\pm 1)})^K\{R\}^{K(Z\pm S\pm 1)}+\cdots$$

$$+ (1/C_{(S\pm P)})^K\{R\}^{K(Z\pm S\pm p)}+\cdots+(1/C_{(S\pm q)})^K\{R\}^{K(Z\pm S\pm q)}\}$$

$$= \{R_0\}^{K(Z\pm S\pm 0)}+\{R_0\}^{K(Z\pm S\pm 1)}+\cdots+\{R_0\}^{K(Z\pm S\pm p)}+\cdots+\{R_0\}^{K(Z\pm S\pm q)}; \qquad (2.1)$$

$$C_{(Z\pm S\pm N)}=S(S-1)\cdots(S-P)(S-N)/N(N-1)\cdots(2)(1) = S!/N!; \qquad (2.2)$$

Where: C(Z±S±N) polynomial regularization coefficient; coefficient subscript letters represent the combination of point elements. ! factorial.

Definition 3: The circle logarithm (relativistic structure): The one-to-one correspondence between the internal elements of the combination of point-state groups and the combination of point-state groups in each layer. Among them, the level K (Z±S) is different, forming an abstract, non-dimensional, relatively variable circular function. The introduction of time becomes an abstract circular logarithmic power equation.

heve: $(1-\eta^2)^Z \sim (\eta)^Z =\{x\}^{K(Z-S)} \cdot \{D\}^{K[Z+S]} = [\{x\} /\{D\}]^{K[Z\pm S]}$

$$= [\{x\}/\{D\}]^{K(Z+0)}+ [\{x\}/\{D\}]^{K(Z+1)}+\cdots+[\{x\} /\{D\}]^{K(Z+P)}+\cdots+[\{x\} /\{D\}]^{K(Z+q)}$$

$$= (1-\eta_a^2)^{K(Z\pm 0)}+(1-\eta_b^2)^{K(Z\pm 1)}+\cdots+(1-\eta_p^2)^{K(Z\pm p)}+\cdots+(1-\eta_q^2)^{K(Z\pm q)}; \qquad (3)$$

Among them: $(1-\eta^2)^Z \sim (\eta)^Z$ indicates that one-price and second-order have equivalence.

Formula: The two "..., ..." represent any finite set of combinations in the infinite, different from the traditional "..." finite calculation.

Definition 4. Expansion of Polynomial and Polynomial Computation Time of Point Group

A point group has infinite point elements {a,b, ...,p, ...,q} or (0,1,2, ..., p, ..., q) from a simple polynomial {P}; {1} elements The {P} elements and {P} elements that are grouped with {1} elements Z=K(Z±S±N±1) to the complex polynomial {NP} are Z=K(Z±S±N±p) The combinatorial set up to infinity becomes a complete (item, calculus) regularized polynomial equation.

There are: polynomial equations

$$\{x_0\pm D_0)^{K(Z\pm S\pm N)} =Ax^{K(Z\pm S\pm N\pm 0)}+ Bx^{K(Z\pm S\pm N\pm 1)}+\cdots$$

$$+Px^{K(Z\pm S\pm N\pm p)}+\cdots+Qx^{K(Z\pm S\pm N\pm q)}+D$$

$$= x_0^{K(Z\pm S\pm N-0)} + x_0^{K(Z\pm S\pm N-1)} \cdot D_0^{K(Z\pm S\pm N+1)}+\cdots$$

$$+x_0^{K(Z\pm S\pm N-p)} \cdot D_0^{K(Z\pm S\pm N+p)}+\cdots+ x_0^{K(Z\pm S\pm N-q)} \cdot D_0^{K(Z\pm S\pm N+q)} \pm D ; \qquad (4)$$

Under balanced conditions $\{x^0\}^Z=\{D_0)^Z$, the regularized polynomial power function is based on the same base circle logarithm, and its power function (path integral, historical record) Z=K(Z±S±N) is Unified unfolding of calculable time.

3. Mathematical combination of elements in point groups

Infinite group of point groups (Z±S) containing elements {a,b,...p,...,q}K(Z±S), with a variety of non-repeating combinatorial sets of polynomials in the S range (item order, calculus)), its mathematically infinitely regularized combination becomes a polynomial item order (differential order value).

$$\{R_0\}^{K(Z\pm S\pm P)} = AR^{K(Z\pm S\pm 0)}+ BR^{K(Z\pm S\pm 1)} +\cdots+PR^{K(Z\pm S\pm p)}+\cdots+QR^{K(Z\pm S\pm q)}$$
$$=(1/C_{(S\pm 0)})^K R^{K(Z\pm S\pm 0)}+(1/C_{(S\pm 1)})^K R^{K(Z\pm S\pm 1)}+\cdots$$
$$+(1/C_{(S\pm p)})^K R^{K(Z\pm S\pm p)}+\cdots+(1/C_{(S\pm q)})^K R^{K(Z\pm S\pm q)}; \quad (5.1)$$

heve: $\{R_0\}^{K(Z\pm S)}=\{X_0\}^{K(Z-S)}=\{D_0\}^{K(Z+S)}=\sum[(1/C_{(S\pm p)})^K\{\prod(R_aR_b\cdots R_p\cdots R_q)^K +\cdots\}]^{K(Z\pm S)}$;

(1)、0 Item order (p=Z±S±0), C(S-0)=1: Unknown multiplicative combination.

$$\{x_0\}^{K(Z\pm S-0)}= \{D_0\}^{K(Z+S+0)} = [(1/C_{(S\pm 0)})^K[\prod(R_a R_b\cdots R_p\cdots R_q)^K]^{K(Z\pm S\pm 0)} ; \quad (5.2)$$

(2)、1 Item order (p=Z±S±1), C(S-1)=S: element(1)-(1) continuous addition combination (called linear equation order)

$$\{x_0\}^{K(Z\pm S-1)}=\{D_0\}^{K(Z+S+1)}=\sum(1/C_{(S\pm 1)})^K[R_a^K+ R_b^K++\cdots+R_q^K]^{K(Z\pm S\pm 1)}; \quad (5.3)$$

(3)、2 Item Order (p=Z±S±2), C(S-2)=S(S-1)/2!: Element (2)-(2) Combination

$$\{x_0\}^{K(Z\pm S-2)}=\{D_p\}^{K(Z\pm S-0)}=\sum C_{(S\pm 2)})^K\{\prod(R_aR_b)^K +\cdots\}^{K(Z\pm S\pm 2)}; \quad (5.4)$$

(4)、p Item Order (p=Z±S±p), $C_{(S-p)}$=S(S-1) (S-2) (S-P)/P!: Element (p)-(p)Combination".

$$\{x_0\}^{K(Z\pm S-p)} =\{D_p\}^{K(Z\pm S+p)}=\sum(1/C_{(S\pm p)})^k\{\prod(R_aR_b\cdots R_p)^K +\cdots\}_p^{K(Z\pm S\pm p)}; \quad (5.5)$$

(5)、q Item Order (p=Z±S±q), $C_{(S-q)}$=S(S-1) (S-2) (S-q)/q!: Element "(q)-(q) ombination".

$$\{x_0\}^{K(Z\pm S-q)} =\{D_q\}^{K(Z\pm S+q)}=\sum(1/C_{(S\pm q)})^K[\prod(R_aR_b\cdots R_q)^K+\cdots]_q^{K(Z\pm S\pm q)}; \quad (5.6)$$

(6), D Balance order (p=(Z±S), $C_{(Z+S)}$=1 Known all-element cascade combination;

$$\{x_0\}^{K(Z\pm S-0)} = \{{}^{KS}\sqrt{\prod X_{(ab\cdots p\cdots q)}}\}^{K(Z-S)};$$
$$\{D_0\}^{K(Z\pm S+0)} = \{{}^{KS}\sqrt{\prod D_{(ab\cdots p\cdots q)}}\}^{K(Z+S)} =\{{}^{KS}\sqrt{D}\}^{K(Z-S)} = D; \quad (5.7)$$

(7), Sum of polynomial regularization coefficients

$$\sum(1/C_{(Z\pm S)})^{K(Z\pm S)} = C_{(S-0)}+C_{(S-1)}+\cdots+C_{(S-p)}+\cdots+C_{(S-q)}+C_{(S+0)}=\{2\}^{K(Z\pm S)}; \quad (5.8)$$

(8), The regularized distribution of combination coefficient is in accordance with Yang Hui-Pascal triangle distribution form.

$$C_{(Z\pm S+N)} =C_{(Z\pm S-N)} ; \quad (5.9)$$

(9), Under normal circumstances $\{D\}\neq\{x\}^{K(Z\pm S)}$, after the circle logarithm is Extracted, it is balanced (or relatively balanced) $\{D\} = \{x\}^{K(Z\pm S)}$;

Among them: discrete state statistical calculation; $\{D\} = \{D_0\}^{K(Z+S)}$;

entangled state mathematics analysis; $\{X\} = \{X_0\}^{K(Z-S)} = \{{}^{KS}\sqrt{D}\}^{K(Z-S)}$; (5.10)

3.2, [*Theorem 1*] The elements of the level group on the point group are "continuous combination" Iterative level "Positive combination" becomes the lower level "inverse combination"; the same level reciprocal combination set and positive combination set have reciprocal inverse play. Bemanh-Hartmanis conjecture

It is known that the set of consecutive combinations of hierarchical elements K(Z±S) on a point group.

Proof: The change of the arbitrarily divided (G+F) element combination set (item order, calculus order) under the same total element (S) level

Set： $\{x_0\}^{K(Z\pm S)}=\{\sum C_{(Z\pm S)}[\prod_{(Z\pm S)}(x_a,x_b,\cdots,x_p,\cdots x_q)^K+\cdots]\}^{K(Z\pm S)}$; $K=(+1,0,-1)$;

$F(\bullet)=\{x_0\}^{K(Z\pm S+F)}=\{\sum(1/C_{(Z\pm S+F)})^K[\prod_{(Z\pm S)}(x_a,x_b,\cdots,x_p,\cdots x_q)^K+\cdots]\}^{K(Z\pm S+F)}$; $K=(+1)$;

$C_{(Z\pm S+F)}=S(S-1)(S-2)\cdots(S-P)(S-F)/F!$; $\sum C_{(Z\pm S\pm F)}=\{2\}^{K(Z\pm S+F)}-1$;

$G(\bullet)=\{x_0\}^{K(Z\pm S-G)}=\{\sum(1/C_{(Z\pm S-G)})^K[\prod_{(Z\pm S)}(x_a,x_b,\cdots,x_p,\cdots x_q)^K+\cdots]\}^{K(Z\pm S-G)}$; $K=(-1)$;

$C_{(Z\pm S-G)}=S(S-1)(S-2)\cdots(S-G)/G!$; $\sum C_{(Z\pm S\pm G)}=\{2\}^{K(Z\pm S-G)}-1$;

Proof (A): The upper positive combination set is divided by the lower positive combination set to obtain the lower reciprocal combination set.

heve： $\{X_{0((Z\pm S)}\}^{K(Z\pm S)}=\{X_{0(Z\pm S)}\}^{K(Z\pm S)}/\{X_{0((Z\pm S\pm F)}\}^{K(Z\pm S\pm F)}\bullet\{X_{0((Z\pm S\pm F)}\}^{K(Z\pm S\pm F)}$

$=[\{X_{0((Z\pm S\pm F)}\}/\{X_{0(S\pm p)}\}]^{-K(Z\pm S\pm G)}\bullet X_{0((Z\pm S\pm F)}{}^{K(Z\pm S\pm F)}$;

Move (iterate)$X_{0((Z\pm S\pm F)}{}^{K(Z\pm S\pm F)}$ to the left of the equal sign

get： $\{X_{0((Z\pm S)}\}^{K(Z\pm S)}/X_{0((Z\pm S+F)}{}^{K(Z\pm S+F)}=[\{X_{0((Z\pm S\pm F)}\}/\{X_{0(S\pm p)}\}]^{-K(Z\pm S\pm F)}$

$=\{(1/C_{(Z\pm S\pm G)})^{-1}[\sum(\prod_{(Z\pm S\pm G)}(X_i^{-1})^{-1}+\cdots]\}^{-K(Z\pm S\pm G)}$

$=\{X_{e(Z\pm S\pm G)}\}^{K(Z\pm S-G)}=G(\bullet)$; （6.1）

among them： $[\{X_{0((Z\pm S+F)}\}/\{X_{0(Z\pm S)}\}]^{-K(Z\pm S\pm F)}=[\{X_{0((Z\pm S-G)}\}/\{X_{0(Z\pm S)}\}]^{K(Z\pm S-G)}$

Proof (B): reciprocity at the same level {S=F±G=P},

Set： F(•) For a known balance function, a positive set of combinations (indicated by open fonts):

$$F(\bullet)=\{\mathbb{D}_{0(Z\pm S)}\}^{K(Z\pm S+F)}$$

$$=A\mathbb{D}^{K(Z\pm S+0)}+B\mathbb{D}^{K(Z\pm S+1)}+\cdots+P\mathbb{D}^{K(Z\pm S+p)}+\cdots+Q\mathbb{D}^{K(Z\pm S+q)}$$

$$=\{\sum(1/C_{(Z\pm S)})^{+1}[\prod_{(Z\pm S\pm F)\ i}(\mathbb{D}_a\mathbb{D}_b\cdots\mathbb{D}_p\cdots\mathbb{D}_q)^{+1}+\cdots]\}^{+K(Z\pm S\pm F)};$$

G(•) A set of combinations (indicated as solid font) called the inverse of an unknown function:

$$G(\bullet)=\{X_{e(Z\pm S)}\}^{K(Z\pm S-G)}$$

$$=Ax^{K(Z\pm S-0)}+Bx^{K(Z\pm S-1)}+\cdots+Px^{K(Z\pm S-p)}+\cdots+Qx^{K(Z\pm S-q)}$$

$$=\{\sum(1/C_{(Z\pm S)})^{-1}[\prod_{(Z\pm S\pm G)i}(x_ax_b\cdots x_p\cdots x_q)^{-1}+\cdots]\}^{-K(Z\pm S\pm G)};$$

heve： $\{X_{0(Z\pm S)}\}^{K(Z\pm S)}=\{X_{0(Z\pm S)}\}^{K(Z\pm S)}/\{X_{0(Z\pm S)}\}^{K(Z\pm S+F)}\bullet\{X_{0(Z\pm S)}\}^{K(Z\pm S+F)}$

$=\{X_{e(Z\pm S)}\}^{-K(Z\pm S-G)}\bullet\{X_{0(Z\pm S)}\}^{+K(Z\pm S+F)}$

$=\{X_{0(Z\pm S)}\}^{K(Z\pm S-G)}\bullet\{X_{0(Z\pm S)}\}^{K(Z\pm S+F)}$

$=G(\bullet)\bullet F(\bullet)$; （6.2）

Same reasoning： $\{X_{0(Z\pm S)}\}^{K(Z\pm S)}=\{X_{0(Z\pm S)}\}^{K(Z\pm S)}/\{X_{0(Z\pm S)}\}^{K(Z\pm S-G)}\bullet\{X_{0(Z\pm S)}\}^{K(Z\pm S-G)}$

$=\{X_{0(Z\pm S)}\}^{K(Z\pm S+F)}\bullet\{X_{0(Z\pm S)}\}^{K(Z\pm S-G)}$

$=F(\bullet)\bullet G(\bullet)$; （6.3）

In the formula：$\{X_{0(Z\pm S)}\}^{K(Z\pm S\pm p)}/\{X_{0(Z\pm S)}\}^{K(Z\pm S\pm p+F)} = \{X_{e(S\pm p)}\}^{K(Z\pm S\pm p-G)}$；
Proof (C): The reciprocal G(•) • F(•) can be inverted
Set: Any {p} level：$(1-\eta_{(Z\pm S)}{}^2)^{K(Z\pm S\pm P)} = \{X_{e(Z\pm S)}\}^{K(Z\pm S-P)}/\{X_{0(Z\pm S)}\}^{K(Z\pm S+P)}$；
heve： $\{X_{0(Z\pm S)}\}^{K(Z\pm S\pm P)}=\{X_{0(Z\pm S)}\}^{K(Z\pm S\pm P)}/\{X_{0(Z\pm S)}\}^{-K(Z\pm S+P)} \cdot \{X_{0(Z\pm S)}\}^{+K(Z\pm S+P)}$
Move (iteration) $\{X_{0(Z\pm S)}\}^{+K(Z\pm S\pm P)}$ to the left to become $\{X_{e(Z\pm S)}\}^{K(Z\pm S-P)}$
get： $\{X_{e(Z\pm S)}\}^{K(Z\pm S-P)} = \{X_{e(Z\pm S)}\}^{K(Z\pm S-P)}/\{X_{0(Z\pm S)}\}^{K(Z\pm S+P)} \cdot \{X_{0(Z\pm S)}\}^{K(Z\pm S\pm P)}$

$$=(1-\eta_{(Z\pm S)}{}^2)^{K(Z\pm S\pm P)} \cdot \{X_{0(Z\pm S)}\}^{K(Z\pm S\pm P)}; \quad (6.4)$$

$$0 \leqslant (1-\eta_{(Z\pm S)}{}^2)^{K(Z\pm S\pm P)} = G(\cdot) \cdot F(\cdot) \leqslant 1; \quad (6.5)$$

Equations (6.1)~(6.5) prove that under the same level regularization, -P=G;+P=F. In other words, the reciprocity of "positive combination set" and "reciprocal combination set" can be used to carry out the inversion of behavioral inversion; introduce the principle of relativity, and get each level "self combination set divided by its own combination. The collection does not have to be 1".

4. Polynomial Relativity Principle

[***Theorem 2***] **The polynomial of the point group introduces the principle of relativity [5] and expands into a circular logarithm equation.**

Now we introduce the principle of relativity into the correspondence between the elements of each level of the point-state group and turn into a logarithmic equation.

set： $G(\cdot) = \{X_0\}^{K(Z\pm S-P)} = \Sigma [(1/C_{(Z\pm S)})^{-1}\{\Pi(x_p{}^{-1})\}^{-1} +\cdots]^{K(Z\pm S-P)} = (1-\eta^2)^{-K(Z\pm S-P)}$；

$$F(\cdot) =\{D_0\}^{K(Z\pm S+P)}=\Sigma [(1/C_{(Z\pm S)})^{+1}\{\Pi(D_p{}^{+1}\}^{+1}+\cdots]^{K(Z\pm S+P)}= (1-\eta^2)^{K(Z\pm S+P)};$$

$$\{R_0\}^{K(Z\pm S)} =\{1/2\}^{K(Z\pm S)} [G(\cdot)+F(\cdot)]^{K(Z\pm S)}$$

heve： $(1-\eta^2)^{K(Z\pm S)}= [G(\cdot)- F(\cdot)]/ [G(\cdot)+F(\cdot)]^{K(Z\pm S)}$

$$= [\{R_0\}- F(\cdot)]/ \{R_0\}^{K(Z\pm S)} = [G(\cdot)- \{R_0\}]/ \{R_0\}]^{K(Z\pm S)}$$

$$(1-\eta^2)^{K(Z\pm S)}=[\{x_0\}/\{D_0\}]^{K(Z\pm S)} = \{x_0\}^{K(Z-S)} \cdot \{D_0\}^{K(Z+S)}$$

$$=(1-\eta^2)^{K(Z\pm S\pm 0)}+(1-\eta^2)^{K(Z\pm S\pm 1))}+\cdots+ (1-\eta^2)^{K(Z\pm S\pm P)} +\cdots+(1-\eta^2)^{K(Z\pm S\pm q)}$$

$$=(1-\eta^2)^{K(Z+S)} \cdot (1-\eta^2)^{K(Z-S)}; \quad (7.1)$$

get： $\{G(\cdot) \cdot F(\cdot) \}^{K(Z\pm S)} =[(1-\eta^2)^{K(Z+S)} \cdot (1-\eta^2)^{K(Z-S)}] \{R_0\}^{K(Z\pm S)}$

$$=(1-\eta^2)^{K(Z\pm S)} \{R_0\}^{K(Z\pm S)}; \quad (7.2)$$

或： $(1-\eta^2)^{K(Z\pm S)} \sim (\eta)^{K(Z\pm S)} = \{G(\cdot) \cdot F(\cdot)\}^{K(Z\pm S+P)}$

$$= [\{x_0\}/\{D_0\}]^{K(Z\pm S)} \sim [\{x_0{}^2\}/\{D_0{}^2\}]^{K(Z\pm S)}$$

$$= [\{x_{e(S\pm p)}\}^{K(Z\pm S-p)} \cdot \{D_{0(S\pm p)}\}^{K(Z\pm S+p)}]$$

$$\sim [\{R^2{}_{e((S\pm p)}\}^{K(Z\pm S-p)} \cdot \{R^2{}_{0(S\pm p)}\}^{K(Z\pm S+p)}];$$

$$= (1-\eta^2)^{K(Z\pm S\pm p)} \cdot \{R_{0(Z\pm S)}{}^2\}^{(Z\pm S\pm p)}; \quad (7.3)$$

（**1**）、Any order-dimensional K(Z±S) regularized polynomial of a point group gives a logarithmic equation after the circle logarithm is extracted.

heve： $[\{X_0\}\pm\{D_0\}]^{K(Z\pm S)} = Ax^{K(Z\pm S\pm 0)}+Bx^{K(Z\pm S\pm 1)}+\cdots+Px^{K(Z\pm S\pm p)}+\cdots+Qx^{K(Z\pm S\pm q)}+D$

$$= \{x_0\}^{K(Z\pm S-0)}/\{D_0\}^{K(Z\pm S+0)}+\{x_0\}^{K(Z\pm S-1)}/\{D_0\}^{K(Z\pm S+1)}+\cdots$$

$$+ \{x_0\}^{K(Z\pm S-p)}/\{D_0\}^{K(Z\pm S+p)}+\cdots+\{x_0\}^{K(Z-q)}/\{D_0\}^{K(Z+q)} \pm D$$

$$= (1-\eta^2)^{K(Z\pm S)}\{0,2\}^{K(Z\pm S)} \cdot \{D_0\}^{K(Z\pm S)}; \quad (7.4)$$

$$(1-\eta^2)^{K(Z\pm S)}=\{\Sigma(1/C_{(Z\pm S)})^{-1}[(\Pi x_p^{-1}+\cdots]\}^{-1}/\{\Sigma(1/C_{(Z\pm S)})^{+1}[(\Pi D_p^{+1}+\cdots]^{+1}\}^{K(Z\pm S\pm p)}+\cdots$$

$$=(1-\eta^2)^{K(Z\pm 0)}+(1-\eta^2)^{K(Z\pm 1)}+\cdots+(1-\eta^2)^{K(Z\pm p)}+\cdots+(1-\eta^2)^{K(Z\pm q)}=\{0\sim 1\}; \quad (7.5)$$

Under balanced conditions $[\{X_0\} = \{D_0\}]^{K(Z\pm S)}$

$[\{X_0\}-\{D_0\}]^{K(Z\pm S)}= \{0\}^{K(Z\pm S)}$ (called zero balance); $[\{X_0\}+\{D_0\}]^{K(Z\pm S)} =\{2\}^{K(Z\pm S)}$ (called big balance);

among them:

$\{R_{0p}\}^{+K(Z\pm P)}= \{R_{0p}\}^{K(Z+P)}$; (S+p) Point state group positive set space;

$\{R_{ep}\}^{-K(Z\pm p)} = \{R_{ep}\}^{K(Z-P)}$; (S-p) Point group inverse set space;

$\{R_{0p}\}^{0K(Z\pm p)} = \{R_{0p}\}^{K(Z\pm P)}$; (S±p) Point group (neutral) balances the set space.

5. Norm Invariance Theorem and Expansion

The stochastic group relativistic structure (or circle logarithm, supersymmetric unit matrix) is a circular logarithmic equation, and each level has three norm invariance theorems and level limits.

[Theorem 3] **Isomorphic circular logarithm equation (the first type of normative invariance)**

The stochastic group relativistic structure (or circle logarithm, supersymmetric unit matrix) is a circular logarithmic equation, and each level has three norm invariance theorems and level limits.

set: $\{X\}^{K(Z-S)}=\Sigma\{{}^{KS}\sqrt{\Pi(ab\cdots p\cdots q)}\}^{K(Z-S)} \neq D=\Sigma\{{}^{KS}\sqrt{D}\}^{+(Z\pm S)}$;

$$\Sigma[(1/C_{(Z\pm S)})^{-1}\{X_p^{-1}+\cdots\}]^{K(Z-S)} =\Sigma[(1/C_{(Z\pm S)})^{+1}\{{}^{KS}\sqrt{D}\}]^{K(Z+S)}$$

Proof: Uncertain Regularization Equilibrium Equation for Entangled Polynomials:

heve: $Ax^{K(Z\pm S\pm N\pm 0)}+ Bx^{K(Z\pm S\pm N\pm 1)}+\cdots+Px^{K(Z\pm S\pm N\pm p)}+\cdots+Qx^{K(Z\pm S\pm N\pm q)} \pm D$

$$=C_{(S\pm 0)}x^{K(Z\pm S\pm N-0)}(A/C_{(S\pm 0)})^{K(Z\pm S\pm N+0)}+C_{(S\pm 1)}x^{K(Z\pm S\pm N-1)}(B/C_{(S\pm 1)})^{K(Z\pm S\pm N+1)}+\cdots$$

$$+C_{(S\pm p)}x^{K(Z\pm S\pm N-p)}(P/C_{(S\pm p)})^{K(Z\pm S\pm N+p}\cdots+C_{(S\pm q)}x^{K(Z\pm S\pm N-q)}(Q/C_{(S\pm q)})^{K(Z\pm S\pm N+q)} \pm D$$

$$= C_{(S\pm 0)}x^{K(Z\pm S\pm N+0)} D_0^{K(Z\pm S\pm N+0)}+ C_{(S\pm 1)}x^{K(Z\pm S\pm N+0)} D_0^{K(Z\pm S\pm N+1)}+\cdots$$

$$+ C_{(S\pm p)}x^{K(Z\pm S\pm N-p)} D_0^{K(Z\pm S\pm N+p)}+\cdots+ C_{(S\pm q)}x^{K(Z\pm S\pm N-q)} D_0^{K(Z\pm S\pm N+q)} \pm D$$

$$= x_0^{K(Z\pm S\pm N-0)} + x_0^{K(Z\pm S\pm N-1)} \cdot D_0^{K(Z\pm S\pm N+1)}+\cdots+x_0^{K(Z\pm S\pm N-p)} \cdot D_0^{K(Z\pm S\pm N+p)}+\cdots$$

$$+ x_0^{K(Z\pm S\pm N-q)} \cdot D_0^{K(Z\pm S\pm N+q)} \pm D$$

$$=\{x_0 \pm D_0)^{K(Z\pm S\pm N)}$$

$$= (1-\eta^2)^Z\{0,2\}^{K(Z\pm S)}\{D_0\}^{K(Z\pm S\pm N)}; \qquad (8.1)$$

or：

$$(1-\eta^2)^Z \sim (\eta)^Z=\{^{KS}\sqrt{D} / R_0\}^Z$$

$$= \left| \begin{matrix} \{^{KS}\sqrt{D} / R_0\}^{K(Z\pm S\pm N\pm 0)} \\ \{^{KS}\sqrt{D} / R_0\}^{K(Z\pm S\pm N\pm 1)} \\ \{\cdots\cdots\} \end{matrix} \right|$$

$$\{^{KS}\sqrt{D} / R_0\}^{K(Z\pm S\pm N\pm p)}$$

$$\{^{KS}\sqrt{D} / R_0\}^{K(Z\pm S\pm N\pm q)}$$

$$= \left| \begin{matrix} (1-\eta^2)^{K(Z\pm S\pm N\pm 0)} & 0 & 0 \cdots 0 \cdots 0 \\ 0 & (1-\eta^2)^{K(Z\pm S\pm N\pm 1)} & 0 \cdots 0 \cdots 0 \\ \cdots\cdots & & \\ 0 & 0 \cdots (1-\eta^2)^{K(Z\pm S\pm N\pm p)} & \cdots 0 \cdots 0 \\ 0 & 0 \quad 0 \cdots 0 \cdots & (1-\eta^2)^{K(Z\pm S\pm N\pm q)} \end{matrix} \right| \qquad (8.2)$$

$$(1-\eta^2)^{K(Z\pm S)}= \{X_e\}^{K(Z-S)}/\{X_0\}^{K(Z+S\pm N)}$$

$$= \quad \Sigma(1/C_{(Z-S)})^{-1}\{^{KS}\sqrt{\Pi X_{(ab\cdots p\cdots q)}}^{K(Z-S-P)}+\cdots\}$$

$$/\Sigma(1/C_{(Z+S)})^{+1}\{D_{(ab\cdots p\cdots q)}\}^{K(Z+S+P)}+\cdots\}^{K(Z+S\pm N)}$$

$$= \quad [\{^{KS}\sqrt{D}\}/\{D_0\}]^{K(Z\pm S\pm N)}; \qquad (8.3)$$

$$0 \leqslant (1-\eta^2)^{K(Z\pm S\pm N)} \leqslant \{1\}^{K(Z\pm S\pm N)}; \qquad (8.4)$$

The isomorphism of the logarithm

$$\{0\}^{K(Z\pm S)}\leqslant(1-\eta^2)^{K(Z\pm 0)}\sim(1-\eta^2)^{K(Z\pm 1)}\sim\cdots\sim(1-\eta^2)^{K(Z\pm p)}\sim\cdots\sim(1-\eta^2)^{K(Z\pm q)}\leqslant\{1\}^{K(Z\pm S)}; \quad (8.5)$$

Entangled state math analysis:

$$0\leqslant(1-\eta^2)^{K(Z\pm p)} =[\{x_0\}/\{D_0\}]^{K(Z\pm p)} =[\{^{KS}\sqrt{D}\}/\{D_0\}]^{K(Z+p)}\leqslant 1; \qquad (8.6)$$

Discrete state statistics calculation:

$$1 = (1-\eta^2)^{K(Z\pm p)} =[\{x_0\}/\{D_0\}]^{K(Z\pm p)} =[\{x_0\}/\{D_0\}]^{K(Z+p)}=1; \qquad (8.7)$$

Comparing the abstract circle logarithms at the same level to the bottom, it can be concluded that the polynomials have the homologous circle logarithm consistency at each level and the unified and shortest computation time is obtained. "~" represents the bottom circle function of isomorphic circle logarithms.

***[Theorem 4],* The unit circle logarithm (the second type of norm invariance).**

Defining homologous circle logarithms: The same-level point group "Differential combination of all combinations is divided by the total combination set" to get the maximum value of ‘1’ to ensure the quantum state of the point space: It belongs to the “Hodge’s guess” idea. Prove that the polynomial power function (hierarchy) is an orderly expansion of natural numbers). (Note: The circle logarithm has a matrix or horizontal representation).

$$(1-\eta^2)^Z \sim (\eta)^Z = \{R_h / R_H\}^Z$$

$$= \begin{vmatrix} \{R_a / R_H\}^{K(Z\ K(Z\pm S\pm N\pm 0)} \\ \{R_b / R_H\}^{K(Z\ K(Z\pm S\pm N\pm 1)} \\ \{\cdots\cdots\} \\ \{R_p / R_H\}^{K(Z\ K(Z\pm S\pm N\pm p)} \\ \{R_q / R_H\}^{K(Z\ K(Z\pm S\pm N\pm q)} \end{vmatrix}$$

$$= \begin{vmatrix} (1-\eta_a^2)^{K(Z\ K(Z\pm S\pm N\pm 0)} & 0 & 0 \cdots 0 \cdots 0 \\ 0 & (1-\eta_b^2)^{K(Z\ K(Z\pm S\pm N\pm 1)} & 0 \cdots 0 \cdots 0 \\ \cdots\cdots \\ 0 \quad 0 \cdots & (1-\eta_p^2)^{K(Z\ K(Z\pm S\pm N\pm p)} & \cdots 0 \quad 0 \\ 0 \quad 0 \quad 0\cdots \quad 0 \cdots & & (1-\eta_q^2)^{K(Z\ K(Z\pm S\pm N\pm q)} \end{vmatrix}$$

$$= (1-\eta_a^2)^{K(Z\pm S\pm N\pm 0)} + (1-\eta_b^2)^{K(Z\pm S\pm N\pm 1)} + \cdots + (1-\eta_p^2)^{K(Z\pm S\pm N\pm p)} + \cdots + (1-\eta_q^2)^{K(Z\pm S\pm N\pm q)}$$

$$= \{1\}^{K(Z\pm S\pm N)} \qquad (9.1)$$

In particular, $(1-\eta^2)^Z \sim (\eta)^Z$ denotes the (secondary) and (one-time) equivalent of the logarithm of the circle, and its dimensionality problem was previously proved by Cantor's straight line and plane. It is logically equivalent [4].

among them: $[(\eta_a^2) + (\eta_b^2) + \cdots + (\eta_p^2) + \cdots + (\eta_q^2)]^{K(Z\pm S)} = [1]^{K(Z\pm S\pm N)}$; (9.2)

or: $[(\eta_a) + (\eta_b) + \cdots + (\eta_p) + \cdots + (\eta_q)]^{K(Z\pm S)} = [1]^{K(Z\pm S\pm N)}$; (9.3)

***[Theorem 5]*, Property logarithm (The third type of norm invariance)**

Defining the total number of combinations of {RH} by the sum of the points of the same state in the hierarchical combination and the average number {R0} of the total term of the combination to obtain the logarithm of the reciprocal of the circle, ensuring that the quantum of a point state has three properties: mid-inverse (red, yellow, blue) The unity, homogeneity, coherence. Belong to the "BSD conjecture" ideas. Prove the connection between the arithmetic properties and analytical properties of Abelian clusters. Prove the connection between the arithmetic properties and analytical properties of Abelian clusters.

have: $(1-\eta^2)^Z \sim (\eta)^Z = \{R_H/R_0\}^{K(Z\pm S)}$

$$= \{R_0 - R_H\}/ R_0\}^{K(Z+S)} + \{R_0 - R_H\}/\{R_0\}^{K(Z\pm S)} + \{ R_0 - R_H\}/ \{R_0\}^{K(Z-S)}$$

$$= [(1-\eta^2) \sim (\eta)]^{K(Z+S)} + [(1-\eta^2) \sim (\eta)]^{(K(Z\pm S)} + [(1-\eta^2) \sim (\eta)]^{-K(Z-S)}$$

$$= \{0 \sim 1\}^{K(Z\pm S)} ; \qquad (10.1)$$

(2) Discussion: In each sub-item (K(Z±S±N±P)), (±P) indicates the increase or decrease of the item order; (±N) indicates the integral and differential order.

$(1-\eta^2)^{+K(Z\pm S)} = [\{R_{ep}\}/\{R_{0p}\}]^{K(Z\pm S)} \leqslant 1, K=+1$; Convergence topology number field;

$(1-\eta^2)^{-K(Z\pm S)} = [\{R_{ep}\}/\{R_{0p}\}]^{K(Z\pm S)} \geqslant 1, K=-1$; Diffusion topological number domain;

$(1-\eta^2)^{0K(Z\pm S)} = [\{R_{ep}\} /\{R_{0p}\}]^{K(Z\pm S)} = 1, K=\pm 0$; Balanced topology number field;

(10.2)

***[Theorem 6]*, The span of polynomial item order (differential order value)**

Regularization polynomials can be converted to the transition between the binomial (item order, calculus) as a combination of changes,

There: polynomial equation F{M}:

$$F\{M\} = \{x_0 \pm D_0)^{K(Z\pm S\pm M)} = Ax^{K(Z\pm S\pm M\pm 0)} + Bx^{K(Z\pm S\pm M\pm 1)} + \cdots$$

$$+Px^{K(Z\pm S\pm M\pm p)}+\cdots+Qx^{K(Z\pm S\pm M\pm q)}+D$$

$$=(1-\eta^2)^Z\{0,2\}^{K(Z\pm S\pm M)}\{D_0\}^{K(Z\pm S\pm M)};\quad \Sigma C_{K(Z\pm S\pm M)}=\{2\}^{K(Z\pm S\pm M)};$$

There: polynomial equation F{Q}:

$$F\{Q\}=\{x_0\pm D_0)^{K(Z\pm S\pm Q)}=Ax^{K(Z\pm S\pm Q\pm 0)}+Bx^{K(Z\pm S\pm Q\pm 1)}+\cdots$$

$$+Px^{K(Z\pm S\pm Q\pm p)}+\cdots+Qx^{K(Z\pm S\pm Q\pm q)}+D$$

$$=(1-\eta^2)^Z\{0,2\}^{K(Z\pm S\pm Q)}\{D_0\}^{K(Z\pm S\pm Q)};\quad \Sigma C_{K(Z\pm S\pm Q)}=\{2\}^{K(Z\pm S\pm Q)};$$

get: The span between F{M} polynomials and F{Q} polynomials:

$$F\{M\}/F\{Q\}=\{2\}^{K(Z\pm S\pm M)}/\{2\}^{K(Z\pm S\pm Q)}=\{2\}^{K(Z\pm S\pm[M\pm Q])};\qquad (11.1)$$

In particular:

(a), the span of the internal (item, calculus) coefficients of the polynomial hierarchy of the point group: N=[M-Q]

$$C_{(Z\pm S\pm[M])}/C_{(Z\pm S\pm[Q])}=C_{(Z\pm S\pm[M-Q])}=C_{(Z\pm S\pm N)}$$
$$=S(S-1)(S-P)(S-M)/M!\,]/[\,S(S-1)(S-P)(S-Q)/Q!]\,;\qquad (11.2)$$

(b), the spanning of the external total coefficients of the polynomial level of the point group: N=[M-Q]

$$\Sigma C_{(Z\pm S\pm M)}/\Sigma C_{(Z\pm S\pm Q)}=\{2\}^{K(N)}]$$
$$=\{2\}^{K(Z\pm S\pm M)}/\{2\}^{K(Z\pm S\pm Q)}=\{2\}^{K(Z\pm S\pm[M-Q]}];\qquad (11.3)$$

[Theorem 7] **Serial/Parallel Theorem for Point Group Polynomials (Data Gathering, State Superposition)**

Defining polynomials and different types of full data sets. There are "serial/parallel" elements (called data collection, function sets, and state superposition) between elements, spaces, and layers to obtain a complex space (called primary and sub-quantity particle superposition, or micro integral).

(1) Parallel equation (k=+1):

Statistical calculation of discrete states: H = A+B+C... (H denotes the power of parallelism),

$$\{D_H\}^Z=\Sigma_H\{D_A+D_B+D_C+\cdots\}^{K(Z+S)}=\Sigma_H\{D_A^{+1}+D_B^{+1}+D_C^{+1}+\cdots\}^{-K(Z+S)};$$

(2), The serial equation (k=-1):

Mathematical analysis of entangled states: H = A•B•C•... (H denotes the power of the series),

$$\{D_H\}^Z=\Sigma_H\{D_A\bullet D_B\bullet D_C\bullet\cdots\}^{K(Z-S)}=\Sigma_H\{D_A^{-1}+D_B^{-1}+D_C^{-1}+\cdots\}^{K(Z-S)};$$

(3), The combined circle logarithm of serial/parallel equations:

Set: power function composition:

$$F\{H\}=\{H\}^{K(Z\pm H)}=\{D_A\}^{K\{(Z\pm A)}+\{D_B\}^{K(Z\pm B)}+\{D_C\}^{K(Z\pm C)};$$

heve: $(1-\eta_{(Z\pm H)}^2)^{K(Z\pm H)}=\Sigma_H\{D_A^{-1}+D_B^{-1}+D_C^{-1}\}^{K(Z-H)}/\Sigma_H\{D_A^{+1}+D_B^{+1}+D_C^{+1}\}^{K(Z+H)}$

Proof: Calculation time isomorphism of serial/parallel polynomial equations:

heve： $F\{X\pm D_H\}^{K(Z\pm H)} = F\{X\pm D_A\}^{(Z\pm A)} + F\{Y\pm D_B\}^{(Z\pm B)} + F\{Z\pm D_C\}^{(Z\pm C)} + \cdots$

$$= (1-\eta_A{}^2)^{K(Z\pm A)}\{0,2\}^{K(Z\pm A)}\{D_A\}^{K(Z\pm A)}$$

$$+(1-\eta_B{}^2)^{K(Z\pm B)}\{0,2\}^{K(Z\pm B)}\{D_B\}^{K(Z\pm B)}$$

$$+(1-\eta_C{}^2)^{K(Z\pm C)}\{0,2\}^{K(Z\pm C)}\{D_C\}^{K(Z\pm C)} + \cdots$$

$$= (1-\eta_{(Z\pm H)}{}^2)^{K(Z\pm H)}\{0,2\}^{K(Z\pm H)} \bullet \{D_A{}^K + D_B{}^K + D_C{}^K + \cdots\}^{K(Z\pm H)}$$

$$= (1-\eta_{(Z\pm H)}{}^2)^{K(Z\pm H)}\{0,2\}^{K(Z\pm H)}\{D_H\}^{K(Z\pm H)}; \quad (12)$$

Equation (12) The serial/parallel equation is uniformly described by the circle logarithm (K=+1, 0, -1), and a good interface for the conversion interface is obtained.

***[Theorem 8]* The isomorphism of the electrodynamic equation (rotation, tensor) of the three-dimensional coordinate of the logarithm of a circle**

The numerator calculus equation of big data tends to appear curl, tensor (zero balance, rotation), and the combined variable (∏xaxb...xp) is projected into an infinite-level projection in three-dimensional coordinates at arbitrary center origins. Note that {xyz}, {x} ,{y},{z};{i},{j},{k}or{y}-{z}={i},{z}-{x}={j},{x}-{ y}=Set of {k} axis coordinates (in bold type).

$$(1-\eta^2)^{K(Z\pm S)} = \Sigma_{\{xyz\}}\{(H)_{\{\mathbf{y}\}}-(H)_{\{z\}}\}^{K(Z\pm S)}\mathbf{\{i\}}$$
$$+\{(H)_{\{z\}}-(H)_{\{x\}}\}^{K(Z\pm S)}\mathbf{\{j\}}+\{(H)_{\{x\}}-(H)_{\{y\}}\}^{K(Z\pm S)}\mathbf{\{k\}}$$
$$=\Sigma_{\{xyz\}}\{(1-\eta_{\{y\}}{}^2)-(1-\eta_{\{z\}}{}^2)\}^{K(Z\pm S)}\mathbf{\{i\}}$$
$$+\{(1-\eta_{\{z\}}{}^2)-(1-\eta_{\{x\}}{}^2)\}^{K(Z\pm S)}\mathbf{\{j\}}+\{(1-\eta_{\{x\}}{}^2)-(1-\eta_{\{y\}})\}^{K(Z\pm S)}\mathbf{\{k\}}$$
$$=\Sigma_{\{xyz\}}\{(1-\eta_{\{yz\}}{}^2)^{K(Z\pm S)}\mathbf{\{i\}}$$
$$+(1-\eta_{\{zx\}}{}^2)^{K(Z\pm S)}\mathbf{\{j\}}+(1-\eta_{\{xy\}}{}^2)^{K(Z\pm S)}\mathbf{\{k\}}$$
$$=\Sigma_{\{xyz\}}\{(1-\eta_{\{x\}}{}^2)^{K(Z\pm S)}\mathbf{\{i\}}+(1-\eta_{\{y\}})^{K(Z\pm S)}\mathbf{\{j\}}+(1-\eta_{\{z\}}{}^{2K(Z\pm S)}\mathbf{\{k\}}; \quad (13.1)$$
$$0 \le (1-\eta_{\mathbf{\{xyz\}}}{}^2)^{K(Z\pm S)} \le \{0,1/2,1\}^{K(Z\pm S)}; \quad (13.2)$$

Zero balance ； $\{X_0-D_0\}^{K(Z\pm S)}=\{0\}^{K(Z\pm S)}=\odot$，

large balance； $\{X_0+D_0\}\}^{K(Z\pm S)}=\{2D_0\}^{K(Z\pm S)}=$◎ ，

***[Theorem9]* The isomorphic limit values (phase change point, critical point) of the logarithmic equation:**

Equations (12) and (13) describe that the regularized polynomial of the infinite point group expands indefinitely through the logarithmic equation (point, line, surface, volume, hyperspace) to obtain the stability zero error, unity, and reciprocity. And homogeneity features.

have: $\{x_0\pm D_0)^{K(Z\pm S\pm N)} = (1-\eta^2)^{K(Z\pm S\pm N)}\{0,2\}^{K(Z\pm S\pm N)}\{D_0\}^{K(Z\pm S\pm N)}$;

Among them: simultaneous equations:

$$(1-\eta^2)^{K(Z\pm S\pm N)} = (1-\eta^2)^{K(Z\pm S\pm N)} \bullet (1-\eta^2)^{K(Z\pm S\pm N)} = \{0,1\}^{K(Z\pm S\pm N)};$$

$$(1-\eta^2)^{K(Z\pm S\pm N)}=(1-\eta^2)^{K(Z\pm S\pm N)}+(1-\eta^2)^{K(Z\pm S\pm N)}=\{0,1\}^{K(Z\pm S\pm N))}; \qquad (14.1)$$

get the equation of (14.1):

$$(1-\eta^2)^{K(Z\pm S\pm N)}=\{0,1/2,1\}^{K(Z\pm S\pm N)}; \quad (K=+1,-1) \qquad (14.2)$$

Formula (14.2) becomes the zero error limit of stability for isomorphic logarithmic equations of point groups.

Among them: $\{D_0\}^{K(Z\pm S\pm N)}$Indicates any large enough prime number (or prime number group)

Belongs to the "Riemann conjecture";

"The critical straight line K (Z±S±N) of the Riemann function is everywhere with an $\{1/2\}^{K(Z\pm S\pm N)}$ abnormal zero value" (14.3)

Belongs to the "Goldbach Conjecture";

"The sum of two prime numbers that are arbitrarily big enough is even."

Even limit: $\{1/2\}^{-(Z\pm S\pm N)}=\{2\}^{+K(Z\pm S\pm N)}$ (14.4)

or: $$\{x_0\pm D_0\}^{K(Z\pm S\pm N)}=(1-\eta^2)^{K(Z\pm S\pm N)}\{2\cdot D_0\}^{K(Z\pm S\pm N)}; \qquad (14.5)$$

$$(1-\eta^2)^{K(Z\pm S\pm N)}=[\{x_0\}/\{D_0\}]^{K(Z\pm S\pm N)}; \qquad (14.6)$$

6. Basic proof of the completeness of {NP}={P}

Definition: Infinite-point state group has complex polynomial$\{NP\}=\{X_0\pm D_0\}^{K(Z\pm S\pm N)/t}$, (NP$\geqslant\pm$2); simple polynomial $\{P\}=\{X_0\pm D_0\}^{K(Z\pm S\pm N)/t}$,(P=$\pm$1); Converted into a unified circular logarithm (relativistic structure) dynamic equation. This is an "abstract mathematical quadratic operation with no concrete element content" for convenient proof and calculation.

The NP complete problem requires that: any uncertainty, nonlinear NP belongs to linear P; not equal to linear P, the reduction of the same P polynomial computing time {NP} = {P} mathematical proof.

The proofs are in three parts:

(1) Necessity: Condition of {NP} reduction {P};

(2) Adequacy: {NP} and {P} have unitary, reciprocal, isomorphic distributions;

(3) Completeness: $\{NP^{K(Z\pm S\pm NP)/t}, \rightarrow \{P\}^{K(Z\pm S\pm pP)/t}$,The calculated time spans are all $\{2\}^{K[N]}$ values;

6.1、 Necessity:

[Proof 1]The complex polynomial{NP}of a point element is a simple polynomial {P}

Suppose there are any finite regions (Z±S) in the infinite number-state domain with changes and directions, $S=\{R_a, R_b,\cdots,R_p, R_q\}$ goes from) (S=±1) “1+1” (a linear combination of one and one) to (S=±2) “2+2” (a nonlinear combination of two and two); then (S=$\pm$2) “p+p” (p With a nonlinear combination of p) (S$\geqslant\pm$2), any finite non-repeating combination (Z±S) up to infinity has a combination of uncertainties. Establishing the principle of relativity of the same level (S) performs a set of various combinations of one-to-one comparisons, namely $\{P\}^{K(Z\pm S\pm P)}$ and $\{NP\}^{K(Z\pm S\pm NP)}$, respectively.

A circular logarithm equation with a uniform description:

$(1-\eta^2)^{K(Z\pm S)}=(1-\eta^2)^{K(Z\pm 0)}+(1-\eta^2)^{K(Z\pm 1)}+\cdots+(1-\eta^2)^{K(Z\pm p)}+\cdots+(1-\eta^2)^{K(Z\pm q)}$; (15.1)

The logarithmic equation is based on the isomorphic function, and its power function (called path integral, history record) becomes a polynomial computable time. The {NP} and {P} elements form different levels of polynomials and all have the same $\{R_0\}^{K(Z\pm S)}=\{R_a, R_b,..., R_p,R_q\}^{K(Z\pm S)}$

heve: $[\{NP\}=(1-\eta^2)^{K(Z\pm S\pm NP)}\{R_0\}^{K(Z\pm S)}] \in [\{P\}=(1-\eta^2)^{K(Z\pm S\pm P)}\{R_0\}^{K(Z\pm S)}]$。

get: $\{NP\}\in\{P\}$; (15.2)

[Proof 2] The complex polynomial {NP} of a point element does not equal a simple polynomial {P}

The various combinations of the relativity principle of the same level (S) are compared to (P) and (NP) polynomials. The polynomials are all based on (Z±S±NP) and (Z±S±P) based on the states $\{R\}=\{R_a, R_b,\cdots, R_p,\cdots R_q\}$ Various elements are not repeated.

heve: $(1-\eta^2)^{K(Z\pm S)}=[\{R_e\}/\{R_0\}]^{K(Z\pm S)}$

$=[\{R_e\}/\{R_0\}]^{K(Z\pm S\pm 0)}+[\{R_e\}/\{R_0\}]^{K(Z\pm S\pm 1)}+\cdots$

$+[\{R_e\}/\{R_0\}]^{K(Z\pm S\pm P)}+\cdots+[\{R_e\}/\{R_0\}]^{K(Z\pm S\pm q)}$

$=(1-\eta^2)^{K(Z\pm S\pm 0)}+(1-\eta^2)^{K(Z\pm S\pm 1)}+(1-\eta^2)^{K(Z\pm S\pm P)}+(1-\eta^2)^{K(Z\pm S\pm q)}$; (16.1)

Point order elements have different combinations of order items. Point order elements have different combinations of order items.

$[\{NP\}=(1-\eta^2)^{K(Z\pm S\pm NP)}\{R_0\}^{K(Z\pm S)}] \neq [\{P\}=(1-\eta^2)^{K(Z\pm S\pm P)}\{R_0\}^{K(Z\pm S)}]$。

get: $\{NP\}\neq\{P\}$; (16.2)

6.2 Adequacy: {NP} and {P} are unitary

[Certificate 3] {NP} and {P} have unitary and point group $\{R\}=\{R_a, R_b,\cdots,Rp,R_q\}$

Let: All of the arbitrary point elements (including positive and negative sets):

$\{R_h\}^{K(Z\pm S)}=\sum(1/C_{(S\pm p)})^{-1}\prod\{R_h{}^{K(Z\pm S)}\}$, Total item set

$\{R_H\}^{K(Z\pm S)}=\sum(1/C_{(S\pm H)})^{-1}\prod\{R_H\}^{K(Z\pm S)}$, introduced formula (10.1)

heve: $(1-\eta^2)^{K(Z\pm S)}=\sum[\{R_h\}/\{R_H\}]^{K(Z\pm S)}$

$=\sum[(R_a{}^K+R_b{}^K+\ldots+R_p{}^K+R_q{}^K]^{K(Z\pm S)}/\sum\{R_H\}]^{K(Z\pm S)}$

$=[(1-\eta_a{}^2)+(1-\eta_b{}^2)+\cdots+(1-\eta_p{}^2)+\cdots+(1-\eta_q{}^2)]^{K(Z\pm S)}=\{1\}^{K(Z\pm S)}$; (17.1)

$\Sigma\ (\eta_i)\sim\eta_i{}^2)=(\eta_a)\sim\eta_a{}^2)+(\eta_b)\sim\eta_b{}^2)+\cdots+(\eta_p)\sim\eta_p{}^2)+\cdots+(\eta_q)\sim\eta_q{}^2)^{K(Z\pm S)}=\{1\}^{K(Z\pm S)}$; (17.2)

Formula (17) proves that the combined set of {R}K(Z±S) elements at each level of a point group is a total sum of the relative total term itself divided by its own sub-item equal to $\{1\}^{K(Z\pm S)}$, Make sure that the states of the points are unfolded, and describe the relative positions of the elements of each group of points in the circle logarithm. The unit circle logarithm (the second specification invariance). Ensure that there is a stable zero-error spread between the power function (P) and the set of points, and that the power function can calculate the length of time with (1, 2, 3,..., natural numbers). (Hodge conjecture ideas).

6.3. Completeness: The span between {PM} and {PQ} is $\{2\}^{K[M-Q]}$

[Certificate IV] The span between the combination of point elements (NP) and (P) is $\{2\}^{K[M-Q]}$

When the binomial coefficient expands, it meets the Yang Hui-Pascal triangle distribution.

$(1)=\{2\}^{K(Z\pm S\pm 0)},C_{S+0}=1$, Combination form: all combinations of S-level elements, $\prod(R_a)$,;

$(1,1)=\{2\}^{K(Z\pm S\pm 1)},C_{S+1}=S$, Combination form: (1+1) elements are not repeated $\sum(R_a)$;

$(1,2,1)=\{2\}^{K(Z\pm S\pm 2)},C_{S+2}=S(S-1)/2!$ Combination form: (2+2) elements are not repeated $\sum(\prod R_{ab})$;

$(1,3,3,1)=\{2\}^{K(Z\pm S\pm 3)}$; $C_{S+3}=S(S-1)(S-2)/3!$ Combination form: (3+3) elements are not repeated $\sum(\prod R_{abc})$;

$(1,4,6,4,1)=\{2\}^{K(Z\pm S\pm 4)}$ $C_{S+3}=S(S-1)(S-2)(S-3)/4!$ Combination form: (4+4) elements are not repeated $\sum(\prod Rabcd)$;

……; And so on,

Any combination of elements of any point group can be written as a binomial,

$\{P\} = [\{R_e\}\pm\{D_0\}]^{K(Z\pm S\pm p)}= (1-\eta^2)^Z\{0,2\}^{K(Z\pm S\pm p)}\{D_0\}^{K(Z\pm S\pm p)}$; Represents $(P = 1)$ a linear equation,

$\{NP\}=[\{R_e\}\pm\{D_0\}]^{K(Z\pm S\pm NP)}=(1-\eta^2)^Z\{0,2\}^{K(Z\pm S\pm NP)}\{D_0\}^{K(Z\pm S\pm NP)}$; Said $(NP\geqslant 2)$ non-linear equation, ...

The difference between the sum of all the binomial power (NP→P) coefficients mentioned above is $\sum C_{K(Z\pm S\pm NP)}=\{2\}^{K(Z\pm S\pm NP)}\rightarrow\sum C_{K(Z\pm S\pm P)}=\{2\}^{K(Z\pm S\pm P)}$

Polynomial computing time span:

$$(1-\eta^2)^{K(Z\pm S\pm[NP-P])}=[[\{R_e\}\pm\{D_0\}]^{K(Z\pm S\pm NP)}/[\{R_e\}\pm\{D_0\}]^{K(Z\pm S\pm P)}]$$

$$=[\{R_e\}\pm\{D_0\}]^{K(Z\pm S\pm[NP-P])}=\{2\}^{K[NP-P]}=\{2\}^{K(N)}; \quad (18.1)$$

That is to say, {NP} reduction {P}, {NP} non-linear equation non-linear equations can be converted to {P} one linear equation one-time linear equations, and their calculation time is the same.

get: $\{NP\}=\{P\}$; (18.2)

Special:

(1) Balance and Unbalance After the circle logarithm is extracted as a relatively balanced condition, $\{D_0\}^{K(Z\pm S)/t}$ is the isomorphic average combination space of the function of the point group, known as the equilibrium (center) function, It is synchronous with the unknown boundary function $\{X_0\}^{K(Z\pm S)/t}$ (Brouwer Center Theorem) [4]. It is shown that the "circular function $(1-\eta^2)^{K(Z\pm S)/t}$" established by the relatively variable point element combination form has the periodicity of isomorphism and is not affected by the power function change [7]. Homogenous calculation time."

(2) When any momentary center of the point group space becomes the center point of the coordinate axis (including space-time), there is no necessary connection with the coordinate axis position and time, which does not affect the calculation result. Riemann manifold differential invariant [8],

(3) Comparison of time complexity:

(a) Relativistic construction (circular logarithm) implements a polynomial-time isomorphism algorithm with time complexity $O\{{}^{KS}\sqrt{D}\}$;

(b) The quantum search algorithm is $O\{\sqrt{D}\}$;

(c) The classic search algorithm (iteration method) is $O\{D\}$[9];

(d) Time complexity exists: $\mathbf{O}\{{}^{KS}\sqrt{D}\} \leqslant \mathbf{O}\{\sqrt{D}\} \leqslant \mathbf{O}\{D\}$;

7. Calculation of high dimensional equations

At present, under the influence of Abel's Impossible Theorem for the high-power-dimensional equation (when the fifth-order and the above equations cannot have a root-like solution), the mathematical analysis method is calculated from the classical square error analysis to the modern variational method, functional analysis, and finite element method. Method, until the computer program analysis, accuracy is "error approximation" calculation. Originated from the fact that Napier, Euler, and Newton-Leibniz calculus were all based on the “logarithm to a fixed value” that began in 1763. In the complete number domain, the “error analysis” cannot be eliminated. This calculation has reached the limit of application calculations. The “zero-error” analysis of the point group “based on the circle logarithm of the relative changeable circle function value” can be used to calculate the stability.

7.1. High-dimensional equations

Point states have infinite point elements {a,b, ...,p, ...,q} or (0,1,2, ..., p, ..., q) from simple one element to one element to P element pair P Element (Z±S±P), then NP element to NP element, (Z±S±NP) infinite level combination. Under the condition of closed equilibrium (zero balance and large balance), a polynomial forming a regularization coefficient,

heve：

$$Ax^{K(Z\pm S\pm 0)}+Bx^{K(Z\pm S\pm 1)}+\cdots+Px^{K(Z\pm S\pm p)}+\cdots+Qx^{K(Z\pm S\pm q)}+D$$

$$=C_{(S\pm 0)}x^{K(Z\pm S-0)}D_0^{K(Z\pm S+0)}+C_{(S\pm 1)}x^{K(Z\pm S-1)}D_0^{K(Z\pm S+1)}+\cdots$$

$$+C_{(S\pm p)}x^{K(Z\pm S-p)}D_0^{K(Z\pm S\pm N+p)}+\cdots+C_{(S\pm q)}x^{K(Z\pm S\pm N-q)}D_0^{K(Z\pm S\pm N+q)}+D$$

$$=\{x_0\pm D_0)^{K(Z\pm S)}$$

$$=(1-\eta^2)^Z\{0,2\}^{K(Z\pm S)}\{D_0\}^{K(Z\pm S)}; \quad (19.1)$$

$$(1-\eta^2)^Z=(1-\eta^2)^{K(Z\pm S+0)}+(1-\eta^2)^{K(Z\pm S\pm 1)}+\cdots+(1-\eta^2)^{K(Z\pm S\pm p)}+\cdots+(1-\eta^2)^{K(Z\pm S\pm q)}$$

$$=\{0\sim 1\}^Z; \quad (19.2)$$

$$(1-\eta^2)^Z=(1-\eta_a^2)^{K(Z\pm S\pm 0)}+(1-\eta_b^2)^{K(Z\pm S\pm 1)}+\cdots+(1-\eta_p^2)^{K(Z\pm S\pm p)}+\cdots+(1-\eta_q^2)^{K(Z\pm S\pm q)}$$

$$=\{1\}^Z; \quad (19.3)$$

heve：

$$0\leqslant(1-\eta^2)^{K(Z\pm S\pm P)}\sim(1-\eta^2)^{K(Z\pm S\pm 1)}\leqslant 1; \quad (19.4)$$

Among them: $\{X_0\}^{K(Z\pm S)}$ $\{D_0\}^{K(Z\pm S)}$represent various combinations of point elements, with unity, reciprocity, isomorphism.

The main steps in the calculation of high power-dimensional equations

(1) .Satisfaction discriminant:

$$0\leqslant(1-\eta^2)^Z= [\{X\}/\{D\}]^{K(Z\pm S\pm N+p)} =[\{^{KS}\sqrt{D}\}/D_0]^{K(Z\pm S\pm N+p)}\leqslant 1;$$

(2) .$(1-\eta^2)^Z/\{D_0\}^{K(Z\pm S\pm p)}$ is converted to $(1-\eta_H^2)^{K(Z\pm S\pm p)}=\{1\}^{K(Z\pm S\pm p)}$;

(3), $(1-\eta_H^2)^Z=(1-\eta_a^2)^Z+(1-\eta_b^2)^Z+(1-\eta_p^2)^Z+(1-\eta_q^2)^Z=\{1\}^Z$;

(4). Calculate each exact value (ie linear unit factor)

$$\{X_H\} =(1-\eta_H^2)^{K(Z\pm S\pm p)}\{D_0\}^{K(Z\pm S\pm p)},$$

$$\{X_a\} =(1-\eta_a^2)^{K(Z\pm S\pm p)}\{D_a\}^{K(Z\pm S\pm p)},$$

$$\{X_b\} =(1-\eta_b^2)^{K(Z\pm S\pm p)}\{D_b\}^{K(Z\pm S\pm p)}, \cdots$$

$$\{X_p\} =(1-\eta_p^2)^{K(Z\pm S\pm p)}\{D_p\}^{K(Z\pm S\pm p)}, \cdots$$

$$\{X_q\} =(1-\eta_q^2)^{K(Z\pm S\pm p)}\{D_q\}^{K(Z\pm S\pm p)}, \qquad (19.4)$$

Among them:$(1-\eta_H^2)^Z=\{1\}^Z$ is a statistical analysis of discrete state; $(1-\eta^2)^Z=\{0\sim1\}$ is a mathematical analysis of entangled state;

7.2. Discrete State Statistics

For intuitive understanding of statistical calculations of discrete states, five simulation data "$\{X\} = (X_a, X_b, X_c,X_d,X_e)$ calculation examples

Known conditions: (password informed: natural number) 5 natural number average {X0} = 3 composition rules; balance value D = 243;

Identify the topological properties of the equation of five times (above):

heve：There are: average value;；$^{KS}\sqrt{D}=243=3$；

prediction $\{X_0\}=(1/C_{(5+0)})(a+b+c+d+e)=(1/5)(5+4+3+2+1)=3$；

It belongs to discrete state

$$(1-\eta^2)^{(Z\pm S-5)} = [\{X_0\}/\{D\} = \{^{KS}\sqrt{D}\} /\{D_0\}]^{(Z\pm S-5)} = [\{3\}/\{3\}]^{(Z\pm S-5)} =1$$

Coefficient：$1+5+10+10+5+1=\{2\}^5=\{32\}$

Five (above) equation mathematical analysis K(Z±S)中(S≥5)：

$$:Ax^5+Bx^4\ Cx^3+Dx^2+ Ex+D$$

$$= x^5\pm 15x^4 + 90x^3\pm 270x^2 +405x\pm 243$$

$$= x^5\pm 5x^4 \{3\}+10x^3\{3\}^2 \pm10x^2\{3\}^3+5x\{3\}^3\pm 243$$

$$= [X_0\pm D_0]^{K(Z\pm5)}$$

$$=\{ (1-\eta^2)^{K(Z\pm5)}\{ 0,2\}^{K(Z\pm5)}\{3\}^{K(Z\pm5)}$$

$$=\{0, (2\cdot3)^5\}^K$$

$=\{0, 7776\}^{K}$;

$0 \leqslant (1-\eta^2)^{K(Z\pm S\pm P)} \sim (1-\eta^2)^{K(Z\pm S\pm 1)} \leqslant 1$; (K=+1,0,-1); (20.1)

That is: There are two balanced, four answers:

$[X_0-D_0]^{K(Z\pm 5)}=(0)^K$ (zero balance);

$[X_0+D_0]^{K(Z\pm 5)}=(7776)^K$ (large balance);

Solving: Predict $5 \cdot \{X_0\}=15$ based on known conditions;

verify: $D=(5 \cdot 4 \cdot 3 \cdot 2 \cdot 1)=243$;

$(1-\eta^2)^{0(Z\pm 5)}=(5+4+3+2+1)/(15)=(\eta_a^2+\eta_b^2+\eta_c^2+\eta_d^2+\eta_e^2)=1$;

Get (or check): $(\eta_a^2,\eta_b^2,\eta_c^2,\eta_d^2,\eta_e^2) \cdot \{15\}=(5,4,3,2,1)$; (20.2)

7.3. Mathematical Analysis of Entangled State

For the intuitive understanding of the mathematical analysis of entangled states, six (above) square cases are calculated. The choice consists of six prime elements "(3,3,5,7,11,13)"; the asymmetry mathematical analysis with entangled states of interaction.

Known conditions: (Password informed) composition rule) Average of six primes plus {X0}=7; balance value D=45045;

Six (above) equation mathematical analysis K(Z±S) (S⩾6)::

Distinguish the topological properties of the six equation:

Judging the average; $({}^{KS}\sqrt{D})=45045=7$; prediction $\{X_0\}=(1/C_{(6+0)})(a+b+c+d+e+f)$ $=(1/6)(3+3+5+7+11+13)=7$; coefficient $(1+6+15+20+15+6+1)=64=\{2\}^{K(Z\pm 6)}$

$\{X\}=\{X_0\}^{0(Z\pm 6)}=\{{}^{KS}\sqrt{D}\}^{0(Z\pm 6)}=\{{}^{KS}\sqrt{45045}\}^{K(Z\pm 6)}$; $\{D_0\}^{K(Z\pm S-6)}=\{7\}^{K(Z\pm 6)}$;

$(1-\eta^2)^{K(Z\pm 6)}=[\{X_0\}/\{D_0\}]^{K(Z\pm 6)}=[\{{}^{KS}\sqrt{D}\}/\{D_0\}]^{(Z\pm 6)}=[\{{}^{KS}\sqrt{45045}\}/\{7\}]^{(Z\pm 6)} \leqslant 1$;

(A) Mathematical analysis of six (above) equations;

$Ax^6+Bx^5\ Cx^4+Dx^3+E^2x+Fx+D$

$=C_{(6+0)}x^6D_0+C_{(6+1)}x^5D_0^1+C_{(5+2)}x^4D_0^2+C_{(5+3)}x^3D_03+C_{(5+4)}x^2D_0^4+C_{(5+5)}xD_0^5+D$; (

$=x^6\pm 6x^5\{7\}^1+15x^4\{7\}^2\pm 20x^3\{7\}^3+15x^2\{7\}^4\pm 6x\{7\}^5+45045$

$=[X_0\pm D_0]^{K(Z\pm S-6)}$

$=(1-\eta^2)^{K(Z\pm S-6)}\{0,2\}^{K(Z\pm S-6)}\{7\}^{K(Z\pm S-6)}$

$=\{0, 14\}^{K(Z\pm S-6)}$

={0(Zero balance), 7529536(Big balance)}; (21.1)

That is, formula (21.1) is the calculation of the balance center, there are two balances,four answers:

$[X_0-D_0]^{K(Z\pm 6)}=(0)^K$(Zero balance); $[X_0+D_0]^{K(Z\pm 6)}=(77529536)^K$(Big balance);

Solution：according to $6 \cdot \{X_0\}=42$, prediction；$D=(3 \cdot 3 \cdot 5 \cdot 7 \cdot 11 \cdot 13)=45045$；

$$(1-\eta^2)^{0(Z\pm 6)}=(3+3+5+7+11+13)/(42)=(\eta_a^2+\eta_b^2+\eta_c^2+\eta_d^2+\eta_e^2\eta_f^2)=1;$$

Get (or check): $(\eta_a^2,\eta_b^2,\eta_c^2,\eta_d^2,\eta_e^2,\eta_e^2)\cdot\{42\}=(3,3,5,7,11,13)$; （21.2）

（B）**Asymmetry analysis (nature number domain**：K=+1,-1）;

(1), Asymmetry (convergence) calculation (K =+1)：$\{X_0\}=7\to\{X_0\}=3$;

$$[X_0\pm D_0]^{+K(Z\pm 6)}=\{(1-\eta_H^2)^{+K(Z\pm 6)}\{0,2\}^{+K(Z\pm S-6)}\{3\}^{+K(Z\pm 6)}; \quad (21.3)$$

(2), Asymmetry (diffusion) calculation (K =-1)：$\{X_0\}=7\to\{X_0\}=13$;

$$[X_0\pm D_0]^{-K(Z\pm 6)}=\{(1-\eta_H^2)^{-K(Z\pm 6)}\{0,2\}^{-K(Z\pm S-6)}\{13\}^{-K(Z\pm 6)}; \quad (21.4)$$

(C) Conclusions: The above examples reflect the generalized number-domain supersymmetry of the “convergence and diffusion” of polynomials (numerical, functional, spatial, and prime) under known average conditions. {NP} (NP⩾±2) is reduced to {P} (P =±1,(or: P⩽NP).

7.4. Stability Analysis Examples in Optimized Combinations

Venture capital, economic assessment, sports competitions, weather analysis, air quality, profit calculations, test scores, and algebra, geometric space, arithmetic, physics, chemistry, life sciences,... have high-dimensional power polynomial analysis in various fields. Traditional assessment analysis uses the average size or total value as the assessment criteria. The average value or the total score is the same when living, and if the sports competition is a “coordinated” approach to rankings, there is sometimes a need for further stability analysis, that is, the high and low stability of the risk judgment (big and small).

Examples of meteorological analysis: There are (8:00~16:00) hours of air quality PM2.5 stability analysis,

(A) Regional determination data:

$R_{0A}=(32,45,67,84,78,62,58,46)/8=472/8=59$ (good air quality);

(B) Regional determination data:

$R_{0B}=(22, 30, 68, 84, 96, 77, 58, 42)/8 = 472/8 = 59$ (good air quality);

Judging its stability; statistical analysis for the discrete state plus (K=0); mathematical analysis for the entangled state of continuous multiplication (K =+1, -1);,

Criterion: $0\leqslant(1-\eta^2)=\Sigma\{(R_0-R_i)/R_0\}\leqslant 1$; the logarithm of the circle is close to {0} for good stability

heve： $(1-\eta_A^2)=(1/8)(32,45,67,84,78,62,53,46)/59$

$=(59-32),(59-45),(67-59),(84-59),(78-59),(62-59),(59-53),(59-46)$

$=(27,14,8,25,19,3,6,13)/8=115/8$

$=14.375$; （22.1）

$(1-\eta_B^2)=(1/8)(22,30,68,84,96,77,58,42)/59$

$=(59-22),(59-30),(68-59),(84-59),(96-59),(77-59),(59-58),(59-4)$

$=(37,29,9,25,37,18,1,17)/8=173/8$

$=21.645$; （22.2）

According to pre-determined criteria: Air quality is measured in both regions, with the

same "59" data for good air quality:
Comparison result: stability A=14.375 is better than B=21.675: （22.3）

8. Conclusion

The core of the complex polytop {NP} and simple polynomial {P} is the various mathematical combinations and sets of point groups. When the point group is based on a relatively variable circle function, it becomes an abstract nondimensional logarithm, with unity, reciprocity, isomorphism, and level limit. It has the consistency of polynomial computing time. The problem of $[\sum(1-\eta_i^2) \sim(\eta_i)]^{K(Z\pm S\pm NP)}$ nonlinear problem reduction $[\sum(1-\eta i2) \sim(\eta i)]^{K(Z\pm S\pm P)}$ is proved.

Get: $\{R\}=(1-\eta^2)^Z \{R_0\}^Z$; (23)

That is, the current language in all polynomial NPs can be expressed using regularized polynomial equations plus the least fixed point operation (in effect, this allows the definition of a recursive function). Similarly, NP can also be used as a complete infinite power equation, a circular logarithmic power equation over relations, functions, values, spaces, prime numbers, and subsets. It contains the infinite order polynomial hierarchy of global quantifiers, and all complex {NP} equivalents About a simple {P} mathematical four arithmetic is established.

The discrete state calculation of large data is combined with the analysis of entangled states. In the unified change and transformation of any space-time, its polynomial becomes a dimensionless quantum logarithmic equation (including dynamic equations), and the parallel discrete state {D0Z} and serial entanglement are unified. State {KS√D}Z calculation model. Among them: (1 - η2) Z has a high-quality interface between serial and parallel structures, which facilitates the management of the unification of parallel computers and single-machine serial algorithms. Improve the efficiency of shared storage systems. The calculation of the isomorphism by the polynomial NP=P is the best algorithm. At this point, there is no secret or password at all in the world. (Finish)

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