

1070.00 **Plurality of Inherent Topological Twonesses**

[1070.00-1077.11 Geometry of Two Scenario]

1071.00 **Systematic Character of Prime Thinkability**

1071.10 **Prime:** Prime means sizeless, timeless, subfrequency. Prime is prehierarchical. Prime is prefrequency. Prime is generalized, a metaphysical conceptualization experience, not a special case.

1071.20 **Systematic Realization:** The mathematician's "purely imaginative," no-thickness, no breadth—ergo, no insiderness or outsiderness— points, lines, and planes are nonexperienceable. All image-ing derives from experience. Conceptually imaginable point, line, and plane experiences are only systemic—i.e., they have polyhedral insiderness, outsiderness, and angular constancy independent of size.

1071.21 Size is always special case realizability. The mathematician's undemonstrable assumption that three points define a plane of no thickness— no radial depth—is therefore subsystemic; ergo, unthinkable, nonoperationally evidencible, and unimaginable; ergo, unemployable as constituents of proofs.

1071.22 Contrary to conventional mathematical dogma three points do not define a nonexistent—ergo, nondemonstrable—no-thickness plane; nor do they define an altitudeless triangle because there can be naught to do the defining systematically. No- thickness is neither experimentally evidencible nor conceptually feasible. System is conceptual independent of size and special case.

1071.23 Operationally omnitriangulated polyhedra may be realized only systematically—i.e., with special case dimensionality or special case radial depth of insiderness. Dimensionality = special case time-size radial depth = frequency.

1071.24 Radial depth is expressed in frequency of omnidirectional wave propagations per unit of time.

1071.25 It takes a minimum of four differentially experienceable event-loci to define a system. System is primitively fourfoldedly experienceable. When humans see three stars, they see three separate special case events: there is neither special case measurability nor generalized considerability. With inherent a priori systemic fourfoldedness there is imaginability of topological vertexes and a sixfoldedness of unique interrelatedness of the inside-from-outside differentiating thinkability. Conceptual = imaginable.

1071.26 Prime thinkability is inherently systemic. Prime epistemology is generalized thinkability. Epistemology discovers intuition.

1071.27 Intuition is the dawning awareness of the experienced, but at first unconsidered, newly occurring, unique, system-defining fourfoldedness apprehending and the epistemological system search for the sixfolded system interrelationships. Comprehension, often misidentified as "understanding," occurs when the six prehending interattractive relationships of the fourfoldedness are identified.

1071.28 Structures are systems and have radial depth; wherefore "surface" triangle structures are always tetrahedra or truncated tetrahedra.

1072.00 **Definability of Structural Systems**

1072.10 **Proposition to Be Proven:** that structural systems are always special case operational realizations in which there is a constant relative abundance of all the topological and system characteristics, the only variable being a quantity multiplier consisting of one of the first four prime numbers—1, 2, 3, and 5—or an intermultiplied plurality of the same first four prime numbers.

1072.11

Given: definition of prime: Sec. [1071.10](#)

Given: definition of system: Sec. [400.01](#)

Given: definition of structure: Sec. [600.02](#)

Given: definition of structural systems: Sec. [610.20](#)

Given: definition of prime tetra, octa, and icosahedra: Sec. [1011.30](#)

Given: definition of subfrequency: Sec. [1011.32](#)

Given: definition of nucleus: Secs. [414](#) and [1012.01](#)

Given: definition of thinkable generalization: Sec. [501](#)

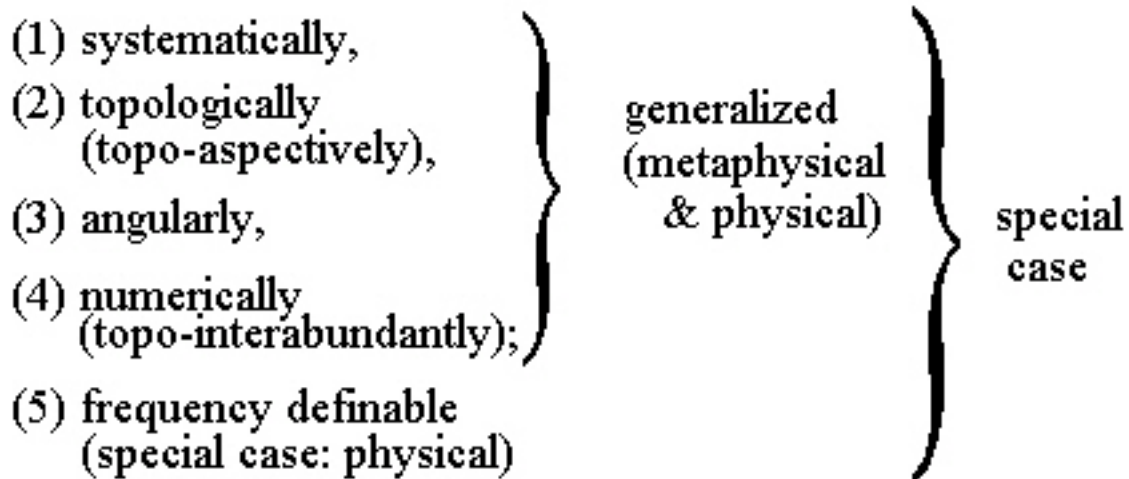
Given: definition of special case realizations: Sec. [504](#)

Given: definition of cosmic inherency: Sec. [1073](#)

Given: definition of two kinds of twoness: Sec. [223.05](#)

1072.20 **Generalized Topological Definability**

1072.21 Generalized principles have topological system definability of angle, number, and constancy. Special cases have unique frequency dimensionability. Wherefore we propose that all recallably thinkable experiencings, physical and metaphysical, are fivefoldedly characterized:



1072.22 All conceptually thinkable, exclusively metaphysical experiencings are fourfoldedly characterized as above. All generalized principles are conceptually thinkable and fourfoldly definable. Generalization is conceptually (i.e., systematically) imaginable independent of (5) frequency.

1072.23 The fifth characteristic, *frequency*, is the unique *special case variable*. Physical experiencings are dependent not only on the four generalizable characteristics, but also on the fifth, frequency (i.e., size).

1072.30 **Wave and Particle Definability**

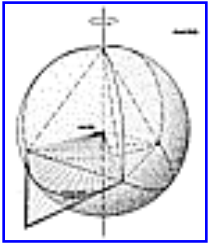
1072.31 Wave as a constant topological aspect is exclusively defined by angle, conceptually independent of frequency; ergo, frequency is the additional special case fifth characteristic—the generalization realized in time.

1072.32 Particle is frequency-definable special case, and wave is angularly defined generalization. The numerically unique condition of special case 5 (not equal) 4 of generalizations identifies the dilemma of physics in reconciling the minimum fourfoldedness of wave definability by angles and the minimum fivefoldedness¹¹ definability of particle particularization by unique frequencies. (See Secs. [541.30](#), [961.46](#), [973.30](#), and [986.720](#)).

(Footnote 11: See Sec. [1053.12-15](#).)

1073.00 **Cosmic Inherency**

1073.10 **Four Kinds of Twoness**



[Fig. 1073.10](#)

1073.11 Since unity is plural and, at minimum, two, the *additive* twoness of systemic independence of the individual system's spinnability's two axial poles, the latter's additive twoness must be added to something, which thinkable somethingness is the inherent systemic *multiplicative* twoness of all systems' congruent concave-convex inside-outness: this additive-two-plus-multiplicative-two fourness inherently produces the interrelationship $2 + 2 + 2$ sixness (threefold twoness) of all minimum structural-system comprehensibility.

1073.12 All systems are conceptually differentiated out of Universe.
 System + environment = Universe Universe - system = environment

1073.13 The environment is dual, consisting of the macro and micro (outsideness and insideness). Ergo, a *fourth twoness* of all prime structural systems is synergetically accountable as

$$2 + 2 + 2 + 2 = 8.$$

(See Fig. [1073.10](#).)

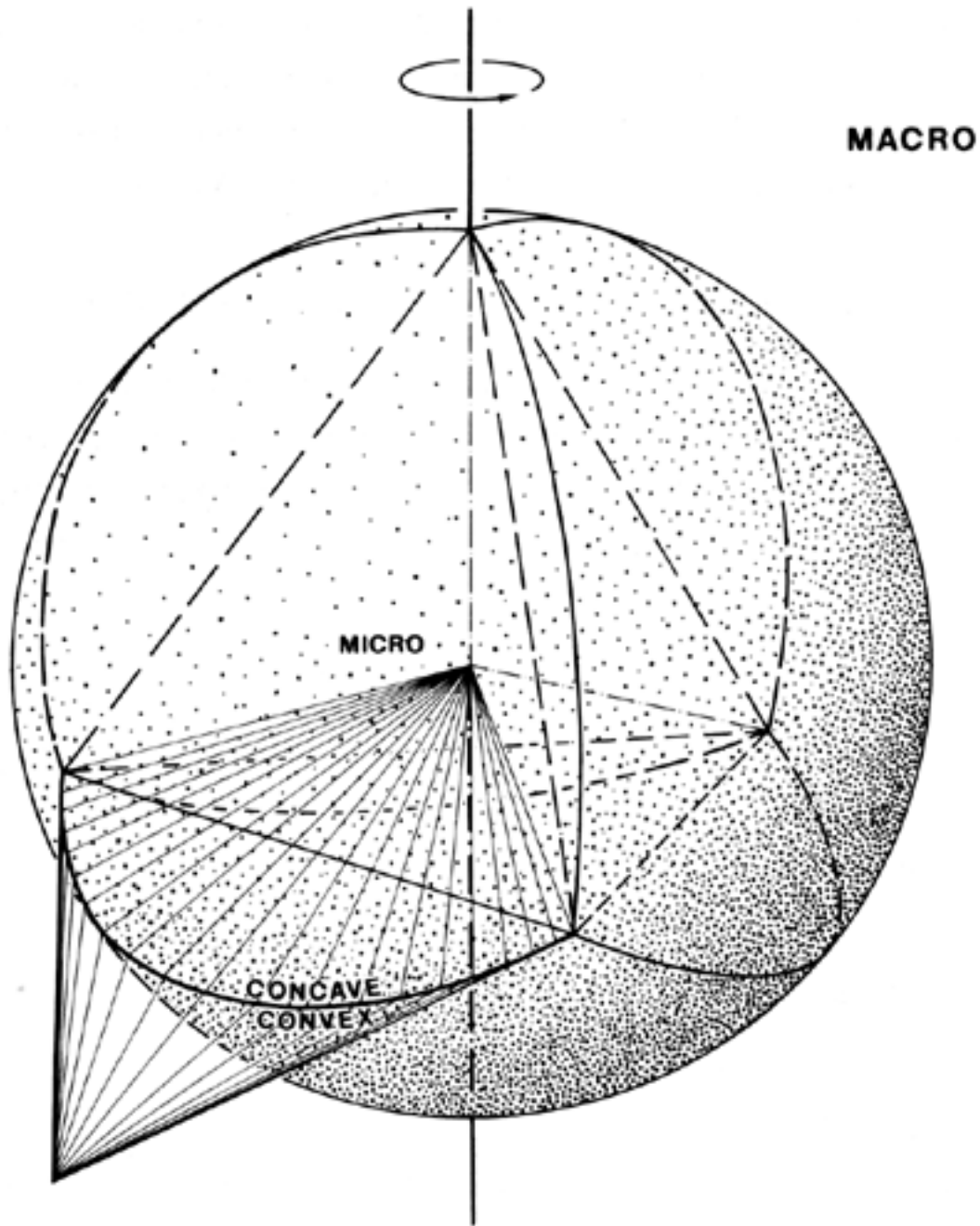


Fig. 1073.10 Cosmic Inherency: Four Kinds of Twoness: Spin twoness is additive. Duality twoness (concave-convex) is multiplicative. The spin twoness and duality twoness together comprise a third relationship twoness. The fourth twoness is comprised of the macro-micro (insideness and outsideness) twoness.

1073.14

Integral system is threefold twoness = 6.

Integral Universe is fourfold twoness = 8.

Spin twoness ... 2

Duality twoness ... 2

Interrelationship twoness ... 2

Environmental twoness ... 2

8

1073.15 **The Indispensable Center:** At the indispensable center of the system convergent-divergent Universe turns itself inside out. The invisible, a priori, multiplicative twoness differentially disclosed in the system's omnitopological hierarchy is manifest of the integrity of the sizeless, timeless nonconceptuality always complementing the conceptual system takeout from nonconceptual Scenario Universe's eternal regenerating. (See Sec. [1006.10](#).)

1073.16 Partial vacuum results as the physical atmospheric gases are removed; beyond those zero evacuations the electromagnetic tensing induces reverse flows of physically demonstrable positive energy (as manifest in cryogenics, in which liquids flow antigravitationally). Vacuum = novent.

1073.20 **Interrelationship Twoness: Third Kind of Twoness**

1073.21 All systems have a neutral axis of spinnability, with two external polar vertexes and two interior center axis vertexes which are congruent— ergo, visible only as one vertex located at the convergence-divergence, integrative-disintegrative, inbound- outbound, turnaround, neutral center of gravity-center of radiation of the system.

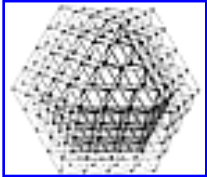
1073.22 The exterior and separate set of two polar vertexes is the additive twoness of systems, and the congruent exterior-interior set is the multiplicative twoness of all systems. The interior-exterior differentiating fourness has an interrelated sixness that differentiates as a unique third kind of twoness of unique interrelatedness of all systems.

1074.00 **Prime Nuclear Structural Systems**

1074.10 All prime nuclear structural systems have one—and only one— (unity two) interior vertex.

1074.11 Internally nuclear structural systems internally consist entirely of tetrahedra that have only one common interior vertex: omniconvertex.

1074.12 In nuclear structural systems each of the surface system's external triangles constitutes the single exterior facet of an omnisystem-occupying set of inter-triple-bonded tetrahedra, each of whose single interior-to-system vertexes are congruent with one another at the convergent nuclear center of the system.



[Fig. 1074.13](#)

1074.13 In all nonredundant, prime, nuclear structural systems the congruently interior-vertexed, omnisystem-occupying tetrahedra of all prime structural systems may all be interiorly truncated by introducing special-case frequency, which provides chordal as well as radial modular subdivisioning of the isotropic-vector-matrix intertriangulation of each radial, frequency-embracing wave layer, always accomplished while sustaining the structural rigidity of the system. (See Fig. [1074.13](#).)

1074.20 **Omnitopological Domains**

1074.21 Omnitopological domains are defined in terms of the system's unique central-angle-defined insideness and its unique surface-angle-defined outsideness. (See Sec. [1006.20](#).)

1074.30 **Spin Twoness and Duality Twoness**

1074.31 Having identified (a) the constant additive twoness of the vertexial poles of the axial spinnability operative in all independent systems, and (b) the multiplicative twoness characterizing the concavity and convexity congruently operative in all independent systems, we find that the first four prime numbers—1, 2, 3, and 5—are the only variables present in the Eulerean topological inventorying of all the omnitriangularly, nonredundantly stabilized, symmetrical polyhedra.

1074.32

Spin twoness is additive.

Duality twoness is multiplicative.

1075.00 **Special Case: Energy and Information**

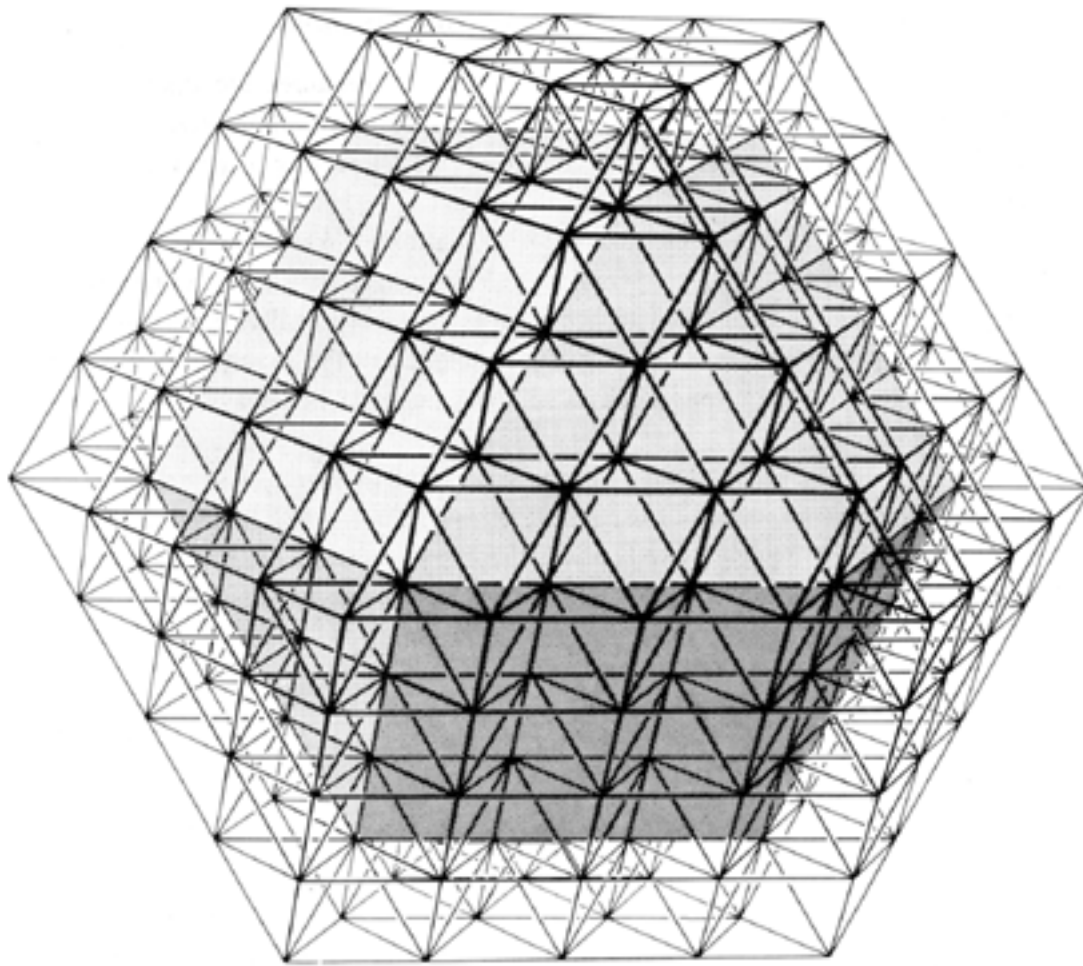


Fig. 1074.13 Nuclear Structural Systems: Nuclear structural systems consist entirely of tetrahedra having a common interior vertex. They may be interiorly truncated by introducing special case frequency, which provides chordal as well as radial modular subdivision of the isotropic-vector-matrix intertriangulation, while sustaining the structural rigidity of the system.

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1075.10 Structures are always special case. Structures are operational. Operational = physically realized. Structures always have unique size. By definition a structure is a complex of energy events interacting to produce a stable pattern.

1075.11 An energy event is always special case. Whenever we have experienced energy, we have special case. The physicist's first definition of physical is that it is an experience that is extracorporeally, remotely, instrumentally apprehensible. Metaphysical includes all the experiences that are excluded by the definition of physical. Metaphysical is always generalized principle .

1075.12 Physical is always special case. Energy is physical and always special case. Information is always special case. Energy is information: information is energy. Special case is always realized by its energetic information Dimension is unique frequency information. Time incrementation is special case information. Concept is general: information is quantitative (special case) .

1075.20 **Equation of Intellect**

1075.21 By thermodynamic law energy may neither be created nor lost in Universe. By synergetic postulate intellect is irrevocable and irreversibly comprehensive—both subjectively and objectively—in respect to energy.

1075.22 Intellect mensurates and modulates relative energy events and event interrelationships. The total quantity of energy operative in Universe is a constant, but a dependent, function of intellect. Universe is the integral of all metaphysical and physical phenomena.

1075.23 In respect to individual humans total energy occurs as a complex of local variables of systematically cooperative, convergent-divergent, complementary-reciprocal, intertransformation patternings of uniquely differentiable local system aspects, accountable by intellect in locally varying magnitudes of concentration. The modulations are selectable, predictable, and governable by intellect to the extent that superficial acceleration permits.

1075.24 Modulations through local transformations are arranged or valved by intellect through inherent associative-disassociative patterning of local energy-complex environments. Thus the aggregate effective energy behavior sum-totally accountable as a universal constant is engaged in its local behaviors by individual experience (and apprehended and appraised by consciously operative intellect) in widely differentiated sets of patterns in variable magnitudes of regenerative pattern concentrations.

1075.25 Wealth is the measurable degree of established operative advantage locally organized by generalized-principle-employing intellect over the locally occurring, differentiable behaviors of universal energy. Wealth is an irreversible advantage: it cannot be expended in a preferred reorganization of past events; it can only be expended in organizing forward events in preferential patterns.

1075.26 The *wealth* advantage increases as intellect comprehends local behaviors and acts in complementary regeneration to produce patterns advantageous to human processes. With every inventorying of local-energy behaviors by intellect, and with the informed rearrangement of them to provide wider, more frequently and precisely modulatable patterns with ever less weight of materials ergo of energy—and fewer seconds of time per accomplished life protection, support, and accommodation function, the established wealth advantage is manifest and the documented knowledge in local Universe increases.

1076.00 **Primitive Regeneration**

1076.10 Prime = primitive. Primitive is generalized principle and not special case. Virgin = primitive. "Virgin soil" = special case. Virgin female human = special case, only because of the "human" case realization. Virginity is a generalized aspect of primitive. There can be no special-case generalized virgins. Virginity is not only prefrequency, it is pretime, pre-special-case, and pre-experienceable-dimension.

1076.11 Virgin identifies the topological insideness aspect of the coincidental insideness-outsideness of all generalized systems independently differentiated from all the macrocosmos Universe outside the virginal system, from all the microcosm Universe inside the virginal system and from the little of the cosmos Universe with which the virgin imaginably differentiates the outsideness from the insideness. And virgin is half a system because unity is plural and at minimum two, the virgin being the prime insideness of concavity to be dimensionally or experientially and operationally realized only by special- case-recognized congruence of the convex outsideness with the inside concavity.

1076.12

Male is convex; $1/2$ system; $1/2$ spin; $1/2$ quantum.

Female is concave; $1/2$ system; $1/2$ spin; $1/2$ quantum.

Engendering is a special-case phenomenon that requires fertilization. Fertilization is the systemic differentiating out of Universe that produces conceptually local Universe marrying the macrocosm to the microcosm, which realizes a new special-case system event with its own set of insideness-outsideness topological characteristics.

1076.13 Physics of the 1970s identifies:

$$2 \text{ quantum} = 1/2 \text{ spin}; \text{ and } 1 \text{ quantum} = 2 \text{ (spin/2)}$$

Conception-birth comes with the realization that the aspects of the externally viewed, plus-curvature convexity that are seemingly separate from those of the internally viewed, minus-curvature concavity have no interveningly differentiating, zero-curvature sheath structurally differentiating the only timelessly (or generalized) conceptual coincidence of both the plus and minus curvature. In the alternately plus-or-minus pulsativeness frequencies of special case time the multiplicative twoness "conception" releases or gives birth to new, coexistent, additive twonesses as independently axially spinnable: special case spin twoness inherently coupled with the duality twoness, producing the individual unity fourness, with its primitive sixfoldedness of integral system interrelatedness and its eightfolded integral Universe environment.

1077.00 **Prime Number Inherency and Constant Relative Abundance**

1077.10 Since the relative interabundance of one nonspin vertex for every two faces and every three edges is a constant topological system condition, we may identify them as a constant interabundance set in terms of the number of vertexes and edges as a constant topological relationship of all symmetrical and triangularly stabilized, modularly unsubdivided, polyhedral systems.

1077.11 We may substitute T, meaning the number of topological system sets, for the bracketed groups:

$$\therefore 2 + 2 = T.$$

And when the symmetrical, omninonredundantly triangulated, modularly unsubdivided systems are subjected to symmetrical modular subdivision, and the number of edge- module subdivisions is represented by F, then:

$$2 + 2NF^2 = T.$$

where the first 2 is the additive spin two; the second 2 is the multiplicative duality two; N is the prime number uniquely characterizing the system; F is the frequency of modular subdividing; and T is the number of topological sets of one vertex plus two faces equal three edges ($1 + 2 = 3$) that exists in the symmetrical structural (because nonredundant) triangulated polyhedral system. Q.E.D.: See Sec. [223](#).

[Next Chapter: 1100.00](#)
