440.01 Equilibrium between positive and negative is zero. The vector equilibrium is the true zero reference of the energetic mathematics. Zero pulsation in the vector equilibrium is the nearest approach we will ever know to eternity and god: the zerophase of conceptual integrity inherent in the positive and negative asymmetries that propagate the differentials of consciousness.

440.02 The vector equilibrium is of the greatest importance to all of us because all the nuclear tendencies to implosion and explosion are reversible and are always in exact balance. The radials and the circumferentials are in balance. But the important thing is that the radials, which would tend to explode since they are outwardly pushing, are always frustrated by the tensile finiteness of the circumferential vectors, which close together in an orderly manner to cohere the disorderly asundering. When the radial vectors are tensilely contractive and separately implosive, they are always prevented from doing so by the finitely closing pushers or compressors of the circumferential set of vectors. The integrity of Universe is implicit in the external finiteness of the circumferential set and its surface-layer, close-packing, radius-contracting proclivity which always encloses the otherwise divisive internal radial set of omnidirectional vectors.

440.03 All the internal, or nuclear, affairs of the atom occur internally to the vector equilibrium. All the external, or chemical, compoundings or associations occur externally to the vector equilibrium. All the phenomena external to—and more complex than—the five-frequency vector equilibria relate to chemical compounds. Anything internal to—or less complex than—the fivefrequency vector equilibrium relates principally to single atoms. Single atoms maintain omnisymmetries; whereas chemical compounds may associate as polarized and asymmetrical chain systems.

440.04 The vector equilibrium is the anywhere, anywhen, eternally regenerative, event inceptioning and evolutionary accommodation and will never be seen by man in any physical experience. Yet it is the frame of evolvement. It is not in rotation. It is sizeless and timeless. We have its mathematics, which deals discretely with the chordal lengths. The radial vectors and circumferential vectors are the same size.

440.05 The vector equilibrium is a condition in which nature never allows herself to tarry. The vector equilibrium itself is never found exactly symmetrical in nature's crystallography. Ever pulsive and impulsive, nature never pauses her cycling at equilibrium: she refuses to get caught irrecoverably at the zero phase of energy. She always closes her transformative cycles at the maximum positive or negative asymmetry stages. See the delicate crystal asymmetry in nature. We have vector equilibriums mildly distorted to asymmetry limits as nature pulsates positively and negatively in respect to equilibrium. Everything that we know as reality has to be either a positive or a negative aspect of the omnipulsative physical Universe. Therefore, there will always be positive and negative sets that are ever interchangeably intertransformative with uniquely differentiable characteristics.

440.06 The vector equilibrium is at once the concentric push-pull interchange, vectorial phase or zone, of neutral resonance which occurs between outwardly pushing wave propagation and inwardly pulling gravitational coherence.

440.07 All the fundamental forms of the crystals are involved in the vector equilibrium. It is a starting-point—not anything in its own right—if it is a vector equilibrium.

440.08 As the circumferentially united and finite great-circle chord vectors of the vector equilibrium cohere the radial vectors, so also does the metaphysical cohere the physical.

440.09 **Zerophase:** Being the zerophase of energy the vector equilibrium is inherently invisible and non-empirically-discoverable, which accounts for its having been for so long unrecognized as the spontaneous equilibrious model. As specialists, scientists seek only the somethings. The vector equilibrium is the only model of nonbeing zero- inflection at the nonmoment of omniintertransformabilities, where anything can happen and must happen singleatomically within and multiatomically without. Specializing science, seeking only somethings, inherently overlooked the nonthing vector equilibrium. Vector equilibria in isotropic vector matrixes produce the discontinuity of particles, while the vector-weaving around the VE nuclei produce the continuity of wave phenomena. 440.10 The vector equilibrium is the most abstract of all the always-andonly abstract scientific generalizations, for it is the heart of all interrelationships existing between— and not in or of— any of all the empirically apprehended intertransforms of the ever-and- everywhere intertransforming Scenario Universe. The vector equilibrium is the zerophase— ergo, inexpressible — interrelationship of all Universe events.

440.11 The word *vacuum* relates specifically to gaseous phenomena. Nature's abhorrence of a vacuum induces physical relationships only in respect to the gaseous states. The vector equilibrium is the nothingness phase of all states of physical Universe: it is the generalization of nothingness, within which generalization the absolute vacuum is a special case event in the gaseous state. The vector equilibrium is such a physically abhorred nonstate as to be the eternal self-starter— ergo, the eternal re-self-starter, ever regenerating the off-zero perturbations, oscillations, and all the wave propagation of all humanly experienceable physical and metaphysical phenomena.

440.12 The sense-coordinating brain of each and every human, like sound or light, has a limit speed of apprehending. There is no instant cerebral cognition. These apprehension lags automatically impose off-center human cognition, which occasions the sense of time in a timeless eternity. The sense of time occasions the conception of life and serial experience. The inherently invisible vector equilibrium self-starters life and ever regenerates life.

441.00 Vector Equilibrium as Zero Tetrahedron

441.01 **Emptiness at the Center:** All four planes of all eight tetrahedra, i.e., 32 planes in all, are congruent in the four visible planes passing through their common vector equilibrium center. Yet you see only four planes. Both the positive and the negative phase of the tetrahedra are in congruence in the center. They are able to do this because they are synchronously discontinuous. Their common center provides the locale of an absolutely empty event.

441.02 Vector equilibrium accommodates all the intertransformings of any one tetrahedron by polar pumping, or turning itself inside out. Each vector equilibrium has four directions in which it could turn inside out. It uses all four of them through the vector equilibrium's common center and generates eight tetrahedra. The vector equilibrium is a tetrahedron exploding itself, turning itself inside out in four possible directions. So we get eight: inside and outside in four directions. The vector equilibrium is all eight of the potentials.

441.021 **Zerovolume Tetrahedron:** The zerovolume phenomenon altogether avoids the operationally prohibited concept of a plurality of lines going through the same point at the same time. In the zerovolume tetrahedron each of the four great circles is folded into a "bow tie" pair of double-bonded tetra, each of which is double-bonded to the three others. The eight vertexes of the eight tetrahedra at each of their four open corners only seemingly pass through each other, whereas each converges to the other and turns around divergently outward at 60 degrees, thus producing a nucleus with an energy potential of eight but presenting the topologically visual aspect and enumeration of only one. (See Secs. <u>623.20</u>, 1033.020 and 1053.810.)

441.03 **Terminal Condition:** The formula for the number of balls in any one of the concentric layers of the vector equilibrium is always  $10F^2 + 2$ . The center ball of a vector equilibrium is the zero layer. The layer frequency is zero just as in the first layer the frequency is one. So zero times 10 is zero; to the second power is zero; plus two is two. So the center ball has a value of two. The significance is that it has its concavity and its convexity. It has both insideness and outsideness. Its center is as far as you can go inward. You turn yourself inside out and come out in the outside direction. Its inbound shell and its outbound shell are equally valid, and though you see them as congruent and as one, they are two. This central sphere center is a cosmic terminal condition.

441.04 Let us consider a tetrahedron, which also always has an externality and an internality. At its internal center is its terminal turn-aroundand-come-outwardagain condition. This is exactly why in physics there is a cosmic limit point at which systems turn themselves inside out. They get to the outside and they turn themselves inside out and come the other way. This is why radiation does not go off into a higher velocity. Radiation gets to a maximum velocity unrestrained in vacuo and then turns itself inward again— it becomes gravity. Then gravity comes to its maximum concentration and turns itself around and goes outward—becomes radiation again.

441.05 This Boltzmann's import-export-import-export; entropy-syntropyentropysyntropy, cosmically complementary, human-heartlike, eternally pulsative, evolutionary regeneration system, also locally manifests itself in the terrestrial biosphere as the ever alternatively, omni-interpulsing, barometric *highs* and *lows* of the weather. 441.10 **Coordinate Symmetry:** In coordinate symmetry, as the faces of the tetrahedron move in toward the opposite vertex, the volume gets less at anexponential velocity of the third power, its surfaces diminish at a secondpower rate of change, and its lines shorten at a covariation rate of the first power. When all four of the tetrahedral faces come to congruence with the same common nucleus of the vector equilibrium, all three of these different rates of size change come synchronously to common zero size. The constant tetrahedral fourness of vertexes and faces, sixness of edges, insideness and outsideness, convexity and concavity—these integrated constants of conceptuality never change.

441.20 **Turbining:** In looking at a tetrahedron, we see that there are around any one vertex three faces and three edges in beautiful synchronization; we say that it all looks simple and logical. We find, however, that the inventory of three faces around each vertex comes out of a total inventory of four that are always available in the tetrahedron. On the other hand, the inventory of three edges around each vertex comes out of a total inventory of six that are available. So the sixness and the foumess are from very different total quantity inventories. Somehow, around any one vertex of the same system nature has arranged to synchronize them in a neat three-to-three balance while using them all in a total symmetry despite their being supplied from their differing inventories.

441.21 Consider the case of the cheese tetrahedron (see Sec. 623.20), where we push one of the faces toward the opposite vertex. We can move that face in until it is congruent with the opposite vertex. There is now no volume, but we have agreed that the condition of symmetry is a constant of the abstractly conceptual system, the tetrahedron: the sixness and the fourness are still there, but they are empty. With one face congruent with the opposite vertex, we have all four planes of the tetrahedron going through the same exact point at the same time, or theoretically as close as we can ever get to exactly. We also have six edges of the tetrahedron going through the same point at the same time. We have agreed that this is a condition that can never happen in reality, but in the vector equilibrium, where there is no size, we have the only possible time when this would seem to occur.

441.22 So we have the total inventory of four faces and six edges going through the same theoretical point at the same moment. We have said that this is a vector equilibrium and in a zero condition and it is nonreality. Nature would not permit it. But a moment later, those six edges *turbine* around that point one way or another—and we have seen plenty of models of the lines turbining around—but we will have to say that there had to be a moment when this plane went from being a positive tetrahedron to being a negative tetrahedron, and it had theoretically to pass through that point.

441.23 Very clearly, vector equilibrium is a zero-size tetrahedron. We have already had tetrahedron as an indestructible phenomenon independent of size. And then we have it getting into its own true zero vector equilibrium. It is a condition that nature apparently does not permit in our life, but what we call physical reality is always a positive and negative pulsating aberration of the whole—a multifrequency-accommodating, vector equilibrium aberratability whole.

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