

954.30 **Nuclear Asymmetric Octahedra:** There are eight additional asymmetric octahedra Couplers surrounding each face of each *Coupler*. It is probable that these eight asymmetric nuclear octahedra and the large variety of each of their respective constituent plus and minus Mite mix may account for all the varieties of intercomplex complexity required for the permutations of the 92 regenerative chemical elements. These eight variables alone provide for a fantastic number of rearrangements and reorientations of the A and B Quanta Modules within exactly the same geometric domain volume.

954.31 It is possible that there are no other fundamental complex varieties than those accounted for by the eight nuclear Coupler-surrounding asymmetrical octahedra. There is a mathematical limit of variation—with our friend octave coming in as before. The Coupler may well be what we have been looking for when we have been talking about "number one." It is quite possibly one nucleon, which can be either neutron or proton, depending on how you rearrange the modules in the same space.

954.32 There are enough coincidences of data to suggest that the bombardment-produced energy entities may be identified with the three energy quanta modules—two A Quanta Modules and one B Quanta Module—allspace-filler complexities of associability, all occurring entirely within one uniquely proportioned, polarized, asymmetrical, nonequilateral, eight-triangle-faceted polyhedron—the Coupler—within whose interior only they may be allspace-fillingly rearranged in a large variety of ways without altering the external conformation of the asymmetrical, octahedral container.

954.40 **Functions of the Coupler:** In their cosmic roles as the basic allspace-filling complementarity pair, our regular tetrahedron and regular octahedron are also always identified respectively by the disparate numbers 1 and 4 in the column of relative volumes on our comprehensive chart of the topological hierarchies. (See Chart [223.64](#).) The volume value 4—being 2^2 also identifies the prime number 2 as always being topologically unique to the symmetrical octahedron while, on the same topological hierarchy chart, the *uniquely asymmetrical* allspace-filling *octahedron*, the Coupler, has a volume of 1, which volume-1-identity is otherwise, topologically, uniquely identified only with the non-allspace-filling regular symmetrical tetrahedron.

954.41 The uniquely asymmetrical octahedron has three XYZ axes and a center of volume, K. Its X and Y axes are equal in length, while the Z axis is shorter than the other two. The uniquely asymmetrical octahedron is always polarly symmetrical around its short Z axis, whose spin equatorial plane is a square whose diagonals are the equilengthed X and Y axes. The equatorially spun planes of both the X and Y axes are similar diamonds, the short diagonal of each of these diamonds being the Z axis of the uniquely asymmetrical octahedron, while the long diagonal of the two similar diamonds are the X and Y axes, respectively, of the uniquely asymmetrical octahedron.

954.42 The uniquely asymmetrical octahedron could also be named the polarly symmetrical octahedron. There is much that is unique about it. To begin with the "heart," or center of volume of the asymmetrical octahedron (knowable also as the polarly symmetrical octahedron, of geometrical volume 1), is identified by the capital letter K because K is always the kissing or tangency point between each and every sphere in all closest-packed unit radius sphere aggregates; *and it is only through* those 12 kissing (tangency) points symmetrically embracing every closest-packed sphere that each and all of the 25 unique great circles of fundamental crystallographic symmetry must pass—those 25 great circles being generated as the 3, 4, 6, 12 = 25 great circle equators of spin of the only-four-possible axes of symmetry of the vector equilibrium. Therefore it is only through those volumetric heart K points of the uniquely asymmetrical octahedra that energy can travel electromagnetically, wavelinearly, from here to there throughout Universe over the shortest convex paths which they always follow.

954.43 The uniquely asymmetrical octahedron is always uniformly composed of exactly eight asymmetrical, allspace-filling, double-isosceles tetrahedra, the Mites, which in turn consist of AAB three-quanta modules each. Though outwardly conformed identically with one another, the Mites are always either positively or negatively biased internally in respect to their energy valving (amplifying, choking, cutting off, and holding) proclivities, which are only "potential" when separately considered, but operationally effective as interassociated within the allspace-filling, uniquely asymmetrical octahedron, and even then muted (i.e., with action suspended as in a holding pattern) until complexes of such allspace-filling and regeneratively circuited energy transactions are initiated.

954.44 The cosmically minimal, allspace-filling Mites' inherent bias results from their having always one A + and one A - triple-bonded (i.e., face-bonded) to constitute a symmetrical isosceles (two-module) but non-allspace-filling tetrahedron to either one of the two external faces, of which either one B + or one B - can be added to provide the allspace-filling, semisymmetrical double-isosceles, triple right-angled, three-moduled Mite, with its positive and negative bias sublimatingly obscured by the fact that either the positive or the negative quantum biasing add together to produce the same overall geometrical space-filling tetrahedral form, despite its quanta-biased composition. This obscurity accounts for its heretofore unbeknownstness to science and with that unbeknownstness its significance as the conceptual link between the heretofore remote humanists and the scientists' cerebrating, while with its discovery comes lucidly conceptual comprehension of the arithmetical and geometrical formings of the whole inventory of the isotopes of all the atoms as explained by the allspace-filling variety of internal and external associabilities and reorientings permitted within and without the respective local octant-filling of the, also in-turn, omni-space-filling, uniquely asymmetrical octahedron, the Coupler.

954.45 As learned in Sections [953](#) and [954](#), one plus-biased Mite and one minus-biased Mite can be face-bonded with one another in three different allspace-filling ways, yet always producing one energy-proclivity-balanced, six-quanta-moduled, double-isosceles, allspace-filling, asymmetrical tetrahedron: the Syte. The asymmetric octahedron can also be composed of four such balanced-bias Sytes (4 As—2 + , 2 - —and 2 Bs—1 + , 1 -). Since there are eight always one-way-or-the-other-biased Mites in each uniquely asymmetrical octahedron, the latter could consist of eight positively biased or eight negatively biased Mites, or any omnigeometrically permitted mixed combination of those 16 (2^4) cases.

954.46 There are always 24 modules (16 As and 8 Bs—of which eight As are always positive and the eight other As are always negative, while the eight Bs consist of any of the eight possible combinations of positives and negatives)⁵ in our uniquely asymmetrical octahedron. It is important to note that this 24 is the same 24-module count as that of the 24-A-moduled regular tetrahedron. We have named the uniquely asymmetrical octahedron the *Coupler*.

(Footnote 5:

8 all plus 0 minus

7 plus 1 minus

6 plus 2 minus

5 plus 3 minus

4 plus 4 minus

3 plus 5 minus

2 plus 6 minus

1 plus 7 minus

0 plus 8 minus

These combinations accommodate the same bow-tie wave patterns of the Indigs (see Sec. [1223](#)). This eight-digit manifold is congruent with the Indig bow-tie wave --another instance of the congruence of number and geometry in synergetics. Because of the prime quanta functioning of the allspace-filling Mites, we observe an elegant confirmation of the omniembracing and omnipermeative pattern integrities of synergetics.)

954.47 We give it the name the Coupler because it always occurs between the adjacently matching diamond faces of all the symmetrical allspace-filling rhombic dodecahedra, the "spherics" (of 96 As and 48 Bs). The rhombic dodecahedron has the maximum number (12) of identical (diamond) faces of all the allspace-filling, unit edge length, symmetrical polyhedra. That is, it most nearly approaches sphericity, i.e., the shortest-radiused, symmetrical, structural, polyhedral system. And each rhombic dodecahedron exactly embraces within its own sphere each of all the closest-packed unit radius spheres of Universe, and each rhombic dodecahedron's volumetric center is congruent with the volumetric center of its enclosed sphere, while the rhombic dodecahedron also embracingly accounts, both congruently and symmetrically, for all the isotropic-vector-matrix vertexes in closest-packed and all their "between spaces." The rhombic dodecahedra are the

unique cosmic domains of their respectively embraced unit radius closest-packed spheres. The center of area, K, of each of the 12 external diamond faces of each rhombic dodecahedron is always congruent with the internal center of volume (tangent sphere's kissing points), K, of all the allspace-filling uniquely asymmetrical octahedra.

954.48 Thus the uniquely asymmetrical octahedra serve most economically to join, or couple, the centers of volume of each of the 12 unit radius spheres tangentially closest packed around every closest packed sphere in Universe, with the center of volume of that omnisurrounded, ergo nuclear, sphere. However the asymmetrical, octahedral coupler has three axes (X, Y, M), and only its X axis is involved in the most economical intercoupling of the energy potentials centered within all the closest-packed unit radius spheres. The Y and M axes also couple two alternative sets of isotropic-vector-matrix centers. The M axis coupling the centers of volume of the concave vector equilibria shaped between closest-packed sphere spaces, and the Y axis interconnecting all the concave octahedral between spaces of unit-radius closest-packed sphere aggregates, both of which concave between- sphere spaces become spheres as all the spheres—as convex vector equilibria or convex octahedra-transform uniformly, sumtotally, and coincidentally into concave-between-unit- radius-sphere spaces. The alternate energy transmitting orientations of the locally contained A and B Quanta Modules contained within the 12 couplers of each nuclear set accommodate all the atomic isotope formulations and all their concomitant side effects.

954.49 We also call it the Coupler because its volume = 1 regular tetrahedron = 24 modules. The Couplers *uniquely bind together* each rhombic dodecahedron's center of volume with the centers of volume of all its 12 omniadjacent, omniembracing, rhombic dodecahedral "spherics."

954.50 But it must be remembered that the centers of volume of the rhombic dodecahedral spherics are also the centers of each of all the closest-packed spheres of unit radius, and their volumetric centers are also omnicongruent with all the vertexes of all isotropic vector matrixes. The Couplers literally couple "everything," while alternatively permitting all the varieties of realizable events experienced by humans as the sensation of "free will."

954.51 We see that the full variety of energy effects made by the variety of uniquely permitted A-and-B-Module rearrangeabilities and reassociabilities within the unique volumetric domain of the Coupler manifest a startling uniqueness in the properties of the Coupler. One of the Coupler's other unique characteristics is that its volume is also the exact prime number 1, which volumetric oneness characterizes only one other polyhedron in the isotropic-vector-matrix hierarchy, and that one other prime-number-one-volumed polyhedron of our quantum system is the symmetric, initial-and-minimal-structural system of Universe: the 24-module regular tetrahedron. Here we may be identifying the cosmic bridge between the equilibrrious prime number one of metaphysics and the disequilibrrious prime number one of realizable physical reality.

954.52 It is also evidenced that the half-population ratio asymmetry of the B Modules (of identical volume to the A Modules) in respect to the population of the A Modules, provides the intramural variety of rearrangements—other than the 1/1 plus-and- minusness—of the all-A-Module-constellated regular tetrahedron.

954.53 The Coupler octahedron is allspace-filling and of the same 24-module volume as the regular tetrahedron, which is not allspace-filling. We go on to identify them with the proton's and neutron's non-mirror-imaged complementation and intertransformability, because one consists of 24 blue A Modules while the other consists of sixteen blue As and eight red Bs, which renders them not only dissimilar in fundamental geometric conformation, but behaviorally *different* in that the As are energy-inhibiting and the Bs are either energy-inhibiting or energy-dissipating in respect to their intramural rearrangeabilities, which latter can accommodate the many isotopal differentiations while staying strictly within the same quanta magnitude units.

954.54 When we consider that each of the eight couplers which surround each nuclear coupler may consist of any of 36 different AAB intramural orientations, we comprehend that the number of potentially unique nucleus and nuclear-shell interpatternings is adequate to account for all chemical element isotopal variations, as well as accommodation in situ for all the nuclear substructurings, while doing so by omnirational quantation and without any external manifestation of the internal energy kinetics. All that can be observed is a superficially static, omniequivectorial and omnidirectional geometric matrix.

954.55 Again reviewing for recall momentum, we note that the unique asymmetrical Coupler octahedron nests elegantly into the diamond-faceted valley on each of the 12 sides of the rhombic dodecahedron (called spheric because each rhombic dodecahedron constitutes the unique allspace-filling domain of each and every unit radius sphere of all closest-packed, unit-radius sphere aggregates of Universe, the sphere centers of which, as well as the congruent rhombic dodecahedra centers of which, are also congruent with all the vertexes of all isotropic vector matrixes of Universe).

954.56 Neatly seated in the diamond-rimmed valley of the rhombic dodecahedron, the unique asymmetrical octahedron's Z axis is congruent with the short diagonal, and its Y axis is congruent with the long diagonal of the diamond-rimmed valley in the rhombic dodecahedron's face into which it is seated. This leaves the X axis of the uniquely asymmetrical octahedron running perpendicular to the diamond face of the diamond-rimmed valley in which it so neatly sits; and its X axis runs perpendicularly through the K point, to join together most economically and directly the adjacent hearts (volumetric centers) of all adjacently closest-packed, unit radius spheres of Universe. That is, the X axes connect each nuclear sphere heart with the hearts of the 12 spheres closest-packed around it, while the Y axis, running perpendicularly to the X axis, most economically joins the hearts (volumetric centers) of the only circumferentially adjacent spheres surrounding the nuclear sphere at the heart of the rhombic dodecahedron, but not interconnecting with those nuclear spheres' hearts. Thus the Y axes interlink an omnisymmetrical network of tangential, unit-radius spheres in such a manner that each sphere's heart is interconnected with the hearts of only six symmetrically interarrayed tangentially adjacent spheres. This alternate interlinkage package of each-with-six, instead of(six-with-twelve, other adjacent spheres, leaves every other space in a closest-packed, isotropic-vector-matrixed Universe centrally unconnected from its heart with adjacent hearts, a condition which, discussed elsewhere, operates in Universe in such a way as to permit two of the very important phenomena of Universe to occur: (1) electromagnetic wave propagations, and (2) the ability of objects to move through or penetrate inherently noncompressible fluid mediums. This phenomenon also operates in such a manner that, in respect to the vertexes of isotropic vector matrixes, only every other one becomes the center of a sphere, and every other vertex becomes the center of a nonsphere of the space interspersing the spheres in closest packing, whereby those spaces resolve themselves into two types—concave vector equilibria and concave octahedra. And, whenever a force is applied to such a matrix every sphere becomes a space and every space becomes a sphere, which

swift intertransforming repeats itself as the force encounters another sphere, whereby the sphere vanishes and the resulting space is penetrated.

954.57 We now understand why the K points are the *kinetic* switch-off-end-on points of Universe.

954.58 When we discover the many rearrangements within the uniquely asymmetric Coupler octahedra of volume one permitted by the unique self-orientability of the A and B Modules without any manifest of external conformation alteration, we find that under some arrangements they are abetting the X axis interconnectings between nuclear spheres and their 12 closest-packed, adjacently-surrounding spheres, or the Y axis interconnectings between only every other sphere of closest-packed systems.

954.59 We also find that the A and B Module rearrangeabilities can vary the intensity of interconnecting in four magnitudes of intensity or of zero intensity, and can also interconnect the three X and Y and M systems simultaneously in either balanced or unbalanced manners. The unique asymmetric octahedra are in fact so unique as to constitute the actual visual spin variable mechanisms of Dirac's quantum mechanics, which have heretofore been considered utterly abstract and nonvisualizable.

954.70 **The Coupler: Illustrations:** The following paragraphs illustrate, inventory, sort out, and enumerate the systematic complex parameters of interior and exterior relationships of the 12 Couplers that surround every unit-radius sphere and every vertexial point fix in omni-closest-packed Universe, i.e., every vertexial point in isotropic vector matrixes.

954.71 Since the Coupler is an asymmetric octahedron, its eight positive or negative Mite (AAB module), filled-octant domains introduce both a positive and a negative set of fundamental relationships in unique system sets of eight as always predicted by the number-of-system-relationships formula:

$$\frac{N^2 - N}{2}$$

which with the system number eight has 28 relationships.

954.72 There being three axes—the X, Y, and M sets of obverse-reverse, polar-viewed systems of eight—each eight has 28 relationships, which makes a total of three times $28 = 84$ integral axially regenerated, and 8 face-to-face regenerated K-to-K couplings, for a total of 92 relationships per Coupler. However, as the inspection and enumeration shows, each of the three sets of 28, and one set of 8 unique, hold-or-transmit potentials subgroup themselves into geometrical conditions in which some provide energy intertransmitting facilities at four different capacity (quantum) magnitudes: 0, 1, 2, 4 (note: $4 = 2^2$), and in three axial directions. The X-X' axis transmits between—or interconnects—every spheric center with one of its 12 tangentially adjacent closest-packed spheres.

954.73 The Y-Y' axis transmits between—or interconnects—any two adjacent of the six octahedrally and symmetrically interarrayed, concave vector equilibria conformed, `tween-space, volumetric centers symmetrically surrounding every unit-radius, closest-packed sphere.

954.74 The M-M' axis interlinks, but does not transmit between, any two of the cubically and symmetrically interarrayed eight concave octahedra conformed sets of `tween-space, concave, empty, volumetric centers symmetrically surrounding every unit-radius, closest-packed sphere in every isotropic vector matrix of Universe.

954.75 The eight K-to-K, face-to-face, couplings are energizingly interconnected by one Mite each, for a total of eight additional interconnections of the Coupler.

954.76 These interconnections are significant because of the fact that the six concave vector equilibria, Y-Y' axis-connected `tween-spaces, together with the eight concave octahedral `tween-spaces interconnected by the M-M' axis, are precisely the set of spaces that transform into spheres (or convex vector equilibria) as every sphere in closest-packed, unit-radius, sphere aggregates transforms concurrently into either concave vector equilibria `tween-spaces or concave octahedra `tween-sphere spaces.

954.77 This omni-intertransformation of spheres into spaces and spaces into spheres occurs when any single force impinges upon any closest-packed liquid, gaseous, or plasmically closest-packed sphere aggregations.

954.78 The further subdivision of the A Modules into two subtetrahedra and the subdividing of the B Modules into three subtetrahedra provide every positive Mite and every negative Mite with seven plus-or-minus subtetrahedra of five different varieties. Ergo $92 \times 7 = 644$ possible combinations, suggesting their identification with the chemical element isotopes.

955.00 Modular Nuclear Development of Allspace-Filling Spherical Domains

955.01 The 144 A and B Quanta Modules of the rhombic dodecahedron exactly embrace one whole sphere, and only one whole sphere of closest-packed spheres as well as all the unique closest-packed spatial domains of that one sphere. The universal versatility of the A and B Quanta Modules permits the omni-invertibility of those same 144 Modules within the exact same polyhedral shell space of the same size rhombic dodecahedron, with the omni-inversion resulting in six 1/6th spheres symmetrically and intertangentially deployed around one concave, octahedral space center.

955.02 On the other hand, the vector equilibrium is the one and only unique symmetric polyhedron inherently recurring as a uniformly angled, centrally triangulated, complex collection of tetrahedra and half-octahedra, while also constituting the simplest and first order of nuclear, isotropically defined, uniformly modulated, inward-outward- and-around, vector-tensor structuring, whereby the vector equilibrium of initial frequency, i.e., "plus and minus one" equilibrium, is sometimes identified only as "potential," whose uniform-length 24 external chords and 12 internal radii, together with its 12 external vertexes and one central vertex, accommodates a galaxy of 12 equiradiused spheres closest packed around one nuclear sphere, with the 13 spheres' respective centers omnicongruent with the vector equilibrium's 12 external and one internal vertex.

955.03 Twelve rhombic dodecahedra close-pack symmetrically around one rhombic dodecahedron, with each embracing exactly one whole sphere and the respective total domains uniquely surrounding each of those 13 spheres. Such a 12-around-one, closest symmetrical packing of rhombic dodecahedra produces a 12-knobbed, 14-valleyed complex polyhedral aggregate and not a single simplex polyhedron.

955.04 Since each rhombic dodecahedron consists of 144 modules, $13 \times 144 = 1,872$ modules.

955.05 Each of the 12 knobs consists of 116 extra modules added to the initial frequency vector equilibrium's 12 corners. Only 28 of each of the 12 spheres' respective 144 modules are contained inside the initial frequency vector equilibrium, and 12 sets of 28 modules each are $7/36$ ths embracements of the full 12 spheres closest packed around the nuclear sphere.

955.06 In this arrangement, all of the 12 external surrounding spheres have a major portion, i.e., $29/36$ ths, of their geometrical domain volumes protruding outside the surface of the vector equilibrium, while the one complete nuclear sphere is entirely contained inside the initial frequency vector equilibrium, and each of its 12 tangent spheres have $7/36$ ths of one spherical domain inside the initial frequency vector equilibrium. For example, $12 \times 7 = 84/36 = 2 \frac{1}{3} + 1 = 3 \frac{1}{3}$ spheric domains inside the vector equilibrium of 480 quanta modules, compared with 144×3.333 rhombic dodecahedron spherics = $479.5 +$ modules, which approaches 480 modules.

955.07 The vector equilibrium, unlike the rhombic dodecahedron or the cube or the tetrakaidecahedron, does *not* fill allspace. In order to use the vector equilibrium in filling allspace, it must be complemented by eight Eighth-Octahedra, with the latter's single, equiangular, triangular faces situated congruently with the eight external triangular facets of the vector equilibrium.

955.08 Each eighth-octahedron consists of six A and six B Quanta Modules. Applying the eight 12-moduled, 90-degree-apexed, or "cornered," eighth-octahedra to the vector equilibrium's eight triangular facets produces an allspace-filling cube consisting of 576 modules: one octahedron = 8×12 modules = 96 modules. $96 + 480$ modules = 576 modules. With the 576 module cube completed, the 12 (potential) vertexial spheres of the vector equilibrium are, as yet, only partially enclosed.

955.09 If, instead of applying the eight eighth-octahedra with 90-degree corners to the vector equilibrium's eight triangular facets, we had added six half-octahedra "pyramids" to the vector equilibrium's six square faces, it would have produced a two-frequency octahedron with a volume of 768 modules: $6 \times 48 = 288 + 480 =$ an octahedron of 768 modules.

955.10 **Mexican Star:** If we add both of the set of six half-octahedra made up out of 48 modules each to the vector equilibrium's six square faces, and then add the set of eight Eighth-Octahedra consisting of 12 modules each to the vector equilibrium's eight triangular facets, we have not yet completely enclosed the 12 spheres occurring at the vector equilibrium's 12 vertexes. The form we have developed, known as the "Mexican 14-Pointed Star," has six square-based points and eight triangular-based points. The volume of the Mexican 14-Pointed Star is $96 + 288 + 480 = 864$ modules.

955.11 Not until we complete the two-frequency vector equilibrium have we finally enclosed all the original 12 spheres surrounding the single-sphere nucleus in one single polyhedral system. However, this second vector-equilibrium shell also encloses the inward portions of 42 more embryo spheres tangentially surrounding and constituting a second closest-packed concentric sphere shell embracing the first 12, which in turn embrace the nuclear sphere; and because all but the corner 12 of this second closest-packed sphere shell nest mildly into the outer interstices of the inner sphere shell's 12 spheres, we cannot intrude external planes parallel to the vector equilibrium's 14 faces without cutting away the interesting portions of the sphere shells.

955.12 On the other hand, when we complete the second vector equilibrium shell, we add 3,360 modules to the vector equilibrium's initial integral inventory of 480 modules, which makes a total of 3,840 modules present. This means that whereas only 1,872 modules are necessary to entirely enclose 12 spheres closest packed around one sphere, by using 12 rhombic dodecahedra closest packed around one rhombic dodecahedron, these 13 rhombic dodecahedra altogether produce a knobby, 14-valleyed, polyhedral star complex.

955.13 The 3,840 modules of the two-frequency vector equilibrium entirely enclosing 13 whole nuclear spheres, plus fractions of the 42 embryo spheres of the next concentric sphere shell, minus the rhombic dodecahedron's 1,872 modules, equals 1,968 extra modules distributable to the 42 embryo spheres of the two-frequency vector equilibrium's outer shell's 42 fractional sphere aggregates omnium outwardly tangent to the first 12 spheres tangentially surrounding the nuclear sphere. Thus we learn that $1,968 - 1,872 = 96 = 1$ octahedron.

955.14 Each symmetrical increase of the vector-equilibrium system "frequency" produces a shell that contains further fractional spheres of the next enclosing shell. Fortunately, our A and B Quanta Modules make possible an exact domain accounting, in whole rational numbers—as, for instance, with the addition of the first extra shell of the two-frequency vector equilibrium we have the 3,360 additional modules, of which only 1,872 are necessary to complete the first 12 spheres, symmetrically and embryonically arrayed around the originally exclusively enclosed nucleus. Of the vector equilibrium's 480 modules, 144 modules went into the nuclear sphere set and 336 modules are left over.

955.20 Modular Development of Omnisymmetric, Spherical Growth Rate Around One Nuclear Sphere of Closest-Packed, Uniradius Spheres: The subtraction of the 144 modules of the nuclear sphere set from the 480-module inventory of the vector equilibrium at initial frequency, leaves 336 additional modules, which can only compound as sphere fractions. Since there are 12 equal fractional spheres around each corner, with 336 modules we have 336/12ths. $336/12\text{ths} = 28$ modules at each corner out of the 144 modules needed at each corner to complete the first shell of nuclear self-embrace by additional closest-packed spheres and their space-sharing domains.

955.21 The above produces $28/144\text{ths} = 7/36\text{ths}$ present, and $116/144\text{ths} = 29/36\text{ths}$ per each needed.

955.30 Possible Relevance to Periodic Table of the Elements: These are interesting numbers because the $28/144\text{ths}$ and the $116/144\text{ths}$, reduced to their least common denominator, disclose two prime numbers, i.e., *seven* and *twenty-nine*, which, together with the prime numbers 1, 2, 3, 5, and 13, are already manifest in the rational structural evolution with the modules' discovered relationships of unique nuclear events. This rational emergence of the prime numbers 1, 3, 5, 7, 13, and 29 by whole structural increments of whole unit volume modules has interesting synergetic relevance to the rational interaccommodation of all the interrelationship permutation possibilities involved in the periodic table of the 92 regenerative chemical elements, as well as in all the number evolutions of all the spherical trigonometric function intercalculations necessary to define rationally all the unique nuclear vector-equilibrium intertransformabilities and their intersymmetric-phase maximum aberration and asymmetric pulsations. (See Sec. [1238](#) for the Scheherazade Number accommodating these permutations.)

955.40 Table: Hierarchy of A and B Quanta Module Development of Omni-Closest-Packed, Symmetric, Spherical, and Polyhedral, Common Concentric Growth Rates Around One Nuclear Sphere, and Those Spheres' Respective Polyhedral, Allspace-Filling, Unique Geometrical Domains (Short Title: Concentric Domain Growth Rates)

	A and B Quanta Module Inventory	Spherical Domains
Rhombic Dodecahedron	= 144 modules	= 1
Initial-Frequency Vector Equilibrium	= 480 modules	= 3 1/3
Octahedron	= 96 modules	= 2/3
Cube	= 72 modules	= 1/2
Tetrahedron	= 24 modules	= 1/6

955.41 Table: Spherical Growth Rate Sequence

1. Modular Development of Omnisymmetric Spherical Growth Rate Around One Nuclear Sphere.
2. Nuclear Set of Rhombic Dodecahedron:
144 modules 1 sphere
3. Vector Equilibrium, Initial Frequency:
480 modules-Itself and 2 1/3 additional spheres
4. Cube-Initial Frequency:
576 modules 4 spheres
5. Octahedron, Two-Frequency:
768 modules 5 1/3 spheres
6. Mexican 14-Point Star:
864 modules 6 spheres
7. Rhombic Dodecahedron, 12-Knobbed Star:
1,872 modules 13 spheres

8. Vector Equilibrium, Two-Frequency:

3,840 modules 26 1/9 spheres

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