Optional Discussion**:**

The reader has likely surmised our approach by glancing at the drawings. Generally, we started each sketch by making one or more identical small volume spheres, each representing one reference volume, i.e., one electron 'mass' unit. Next, we made one or more larger spheres around that. And often, even one still larger sphere around all that. Then we compared the volume ratio of the large sphere to small sphere, and we discovered that that ratio almost equaled the mass ratio of some major particle to the electron, in physics. (Sometimes we averaged together two major volumetric ratios to create a third ratio for our comparisons.) Generally we found great close matches. So not likely just coincidental.

When we assume, in a neat pattern, that large and small volume spheres are proportional to large and small masses of real particles; we are making a 'uniform density assumption'. And that is similar to a rather successful assumption that Bohr used in his 'liquid drop model of a nucleus'. Interestingly, there are no compact (standard) particles in the range of "greater than 1 electron mass but less than 200." That is likely because even if such mass tried to spin near the velocity of light, it still could not achieve as much angular momentum as something called, "a Planck's Bar Constant" amount, which relates to "Heisenberg's Uncertainty Principle." But the 'free' electron, outside a nucleus, is not a compact particle. Instead, like a spread-out puffball or doughnut, it thus achieves sufficient angular momentum.

Our approach generally achieves very good matches, provided we are looking for the mass ratios of **major** prominent particles to match with volume ratios in patterns having **major** basic symmetries! ((We do not seek here to match volume ratios in minor patterns (having merely minor symmetries) with mass ratios of minor, non-prominent particles; and we would not expect that to match well. That is because less prominent particles generally have relatively short 'half-lives', and are less stable, and their actual mass may be determined by too many relatively minor factors to estimate well the effect of each factor.)) By contrast, the particles with mass ratios that nearly match the ratios in our most symmetrical, major patterns – generally have substantially longer half-lives. And that provides a 'double check' that our correspondence is very meaningful. Generally in physics, high-mass particles are less stable than smaller mass particles.

The term 'particle Resonance energy', or its 'equivalent mass', roughly means this: Consider particle scattering experiments, and if one of the particles is, say, the heaviest Sigma Hyperon and the other is, say, any other lighter particle. Empirically, when one particle is traveling toward the other at high velocity, it is found that when their total energy (or mass equivalent) is near a special value, scattering occurs especially often. And when their total energy is somewhat above or below that value, less scattering occurs. So that special pro-scattering total energy value (that that energized Sigma Hyperon contributed to) -- is termed a 'Sigma Hyperon Resonance Energy'. Thus, in the above case, we compare a special total mass value, M, of the target plus projectile particle ((having an equivalent total resonance energy, $E = (M)c^2$)) -- to the 'rest mass of the electron', (m_e). And that is a major equivalent mass ratio, $(M) / (m_e)$, in this case. So we then find a major geometric pattern ratio that nearly matches it.

Readers are reminded that I believe the spheres in my sketched patterns are proportional to actual sphere sizes existing in a 'universal aether'. And that the amount of ethereal energy in the 'ethereal spheres' is also proportional to those spheres' volumes. I believe that the stability of the masses of real high-density particles is greatly enhanced when those particles' $E = mc^2$ energies equal the ethereal energies in ethereal spheres that fit nicely into an ethereal pattern matching one in my neat sketches. Those major short-life particles are often made when 'cosmic rays' from outer space hit the nuclei of atoms in our upper atmosphere. And also made in labs. And they affect life on earth and evolution.

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