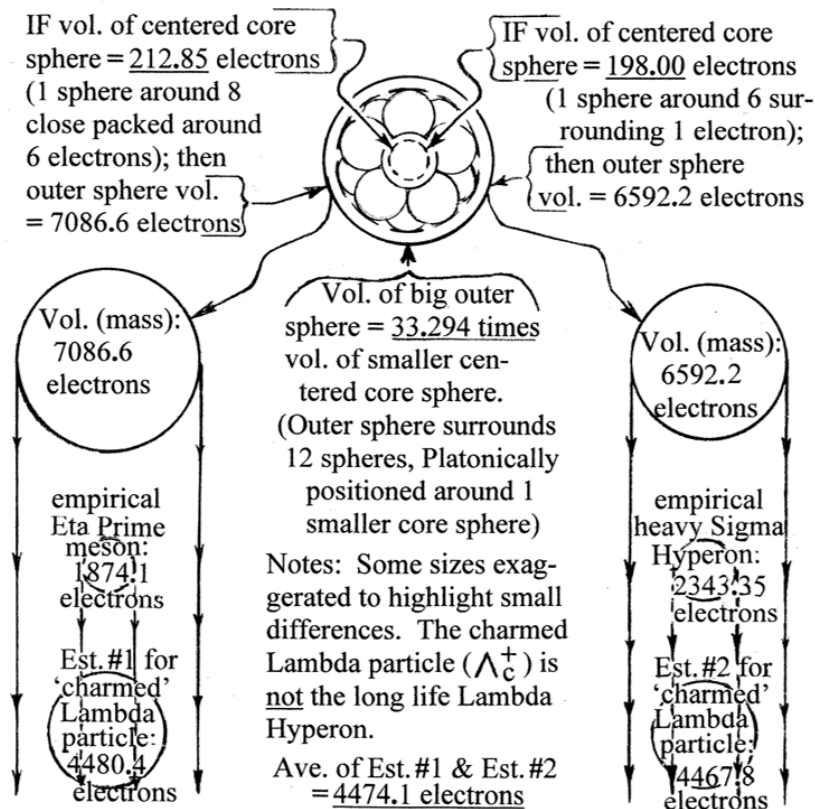. Near the upper-center of the dwg., one large sphere surrounds a pattern of 12 platonically positioned spheres, and those 12 surround a medium-size core sphere, shown dashed, because it is hidden. If that core sphere has a Vol . of 212.85 electrons (as described at its left and on pg. 8), a 7086.6 electron vol. outer sphere results, as shown. That <u>7086.6 vol. is very near</u> the empirical mass of the <u>Xi double- charm baryon</u>, Ξ_{cc}^{++}, 7086.1 electrons. (For another way to make and est. it, and for more details, see pg. 20A.)

. If, instead of a 212.85 electron core, the core sphere vol. is only 198.00 electrons (as described at its right and on pg. 7); then a smaller outer sphere would result, 6592.2 electrons, as shown.

IF vol. of centered core sphere = <u>212.85</u> electrons (1 sphere around 8 close packed around 6 electrons); then outer sphere vol. = 7086.6 electrons

IF vol. of centered core sphere = <u>198.00</u> electrons (1 sphere around 6 surrounding 1 electron); then outer sphere vol. = 6592.2 electrons

Vol. (mass): 7086.6 electrons

Vol. of big outer sphere = <u>33.294 times</u> vol. of smaller centered core sphere. (Outer sphere surrounds 12 spheres, Platonically positioned around 1 smaller core sphere)

Vol. (mass): 6592.2 electrons

empirical Eta Prime meson: 1874.1 electrons

Notes: Some sizes exaggerated to highlight small differences. The charmed Lambda particle (Λ_c^+) is <u>not</u> the long life Lambda Hyperon.

empirical heavy Sigma Hyperon: 2343.35 electrons

Est.#1 for 'charmed' Lambda particle: 4480.4 electrons

Ave. of Est.#1 & Est.#2 = <u>4474.1 electrons</u>

Est.#2 for 'charmed' Lambda particle: 4467.8 electrons

Est.#1 at lower left is the ave. Vol. of the 2 spheres above it, and Est.#2 at the lower right is the ave. of the 2 spheres directly of above it. So, the ave. of Estimates 1 & 2 = 4474.1 electrons, our est. for the Charm-Lambda Baryon (Hyperon), Λ_c^+.

. But another baryon, the Bottom-Lambda, Λ_b^0, can be estimated by averaging the empirical mass of the Charm B meson, (B_c^+), 12,281,8 electrons and the Vol. of 1 big sphere surrounding 3 ave. Kaons, (see pg. 19), giving 9703.6 electrons. That Ave.= 10,992.7 electrons, our est. for the Bottom-Lambda, Λ_b^0.

. <u>Fig. 5X</u>, our above est. for the masses of the Charm-Lambda Baryon (Hyperon), Λ_c^+, 4474.1 electrons; the Bottom-Lambda, Λ_b^0, 10,992.7 electrons; and (near top of page) the Xi double charm baryon, Ξ_{cc}^{++}, 7086.6 electrons. Those estimates vs. empirical masses: Λ_c^+ = 4474.5, Λ_b^0 = 10,998.4 roughly, and Ξ_{cc}^{++} = 7086.1 electrons, respectively.