Higgs Like Fluctuation at 240 GeV Possible Evidence for Sphere Theory's Cuboctahedron Structure of Hubble Sphere Universe

Michael John Sarnowski

email; thilel@charter.net

1. Abstract

This paper proposes that the Atlas Higgs-Like fluctuation at 240 GeV, with 3.6 sigma probability, may be possible evidence for Sphere Theory's Cuboctahedron Structure of Hubble Sphere Universe.

Philip Gibbs highlights a prediction of Tony Smith's prediction for a mass at 240 GeV. Tommaso Dorigo, writes an article about it on Science 2.0 and offers a possible wager.

Due to the propagation of light, gravity, charge, magnetism etc., and their quantized values, it has been hypothesized that, the universe should be filled with some type of almost homogeneous structure. It was shown in "Evidence for Granular Spacetime"(1) that charge and gravity could be modeled by a sphere with a Compton wavelength radius of the neutron. If the neutron Compton wavelength is important to the propagation of charge and gravity then it is proposed that it also must be connected to some structure of the volume in which these forces are transmitted. "Underlying Cuboctahedron Packing of Planck Spinning Spheres Structure of the Hubble Universe" establishes a strong correlation, on multiple levels, between underlying packing of Planck Spinning Spheres structure of the Hubble Universe correlation with higgs mass, W boson, Z boson, bottom Quark and top Quark and a cuboctahedron –Vector Equilibrium structure using the mass of the neutron and the combining of the layers of a cuboctahedron packing of spheres.

The layers of a cuboctahedron follow a consistent progression for the quantity of spheres that can be packed in a layer. The masses of the w boson, z boson, bottom quark, top quark and the Higgs can be directly correlated to the first few layers of a cuboctahedron structure, and in a mirror manner described in this paper. This paper now shows that the Higgs-Like fluctuation at 240 GeV also follows the cuboctahedron progression for the quantity of spheres that can be packed in a layer.

2. Calculations

When using cuboctahedron packing of spheres, a pattern for the masses of the Higgs-Like fluctuation at 240 GeV, W, Z, and Higgs bosons and Bottom and Top quarks can be observed. This is a calculated value, which is shown below.

Higgs Like Fluctuation at 240 GeV Possible Evidence for Sphere Theory's Cuboctahedron Structure of Hubble Sphere Universe

Note that cuboctahedron packing of spheres has a predictable sequence to the amount of spheres contained in each layer.(3)

$$Layer(N) = 10N^2 + 2$$

except layer 0 which is equal to 1

Layer 0 - 1 sphere	Layer 2 - 42 spheres	Layer 4 - 162 spheres	Layer 6 - 362 spheres
Layer 1 - 12 spheres	Layer 3 - 92 spheres	Layer 5 - 252 spheres	

Higgs-Like fluctuation at 240 GeV

The Higgs-Like fluctuation at 240 GeV found by Atlas has a 3.6 sigma significance (5). From "Evidence for Granular Spacetime"(1) we found that the forces of charge and gravity could be calculated using 1/3 of the mass of the electron or neutron in the equations. We will also use 1/3 of the masses of the neutron for correlating the mass of the Higgs-Like fluctuation at 240 GeV The z boson and w boson as well as the Higgs boson and Bottom and Top Quark calculated further on.

The accepted value for the Higgs-Like fluctuation at 240 GeV is close to 240 GeV.

Higgs-Like fluctuation at 240 GeV 240 GeV (5)

If we take the 4th, 5th, and 6th layer of sphere packed cuboctahedron structure we have 42 and 252 spheres. Multiplying this by 1/3 of the neutron mass yields the following;

(162+252+362)*0.939565378 Gev/3= 240.03 GeV

When we take the ratio of the actual Higgs-Like fluctuation mass to this calculated value we obtain 0.98752.

The mass of the Higgs-Like fluctuation at 240 GeV was predicted by an independent researcher (Tony Smith) who is named by Tommaso Dorigo in the article "An ATLAS 240 GeV Higgs-Like Fluctuation Meets Predictions From Independent Researcher" (5).

W and Z Bosons

The W boson and Z boson mediate the weak force. From "Evidence for Granular Spacetime"(1) we found that the forces of charge and gravity could be calculated using 1/3 of the mass of the electron or neutron in the equations. We will also use 1/3 of the

masses of the neutron for correlating the mass of the z boson and w boson as well as the Higgs boson and Bottom and Top Quark calculated further on.

The accepted value for the Z boson mass is as follows.

Z boson 91.1876±0.0021 GeV/c2 (2)

If we take the 2nd and 5th layer of sphere packed cuboctahedron structure we have 42 and 252 spheres. Multiplying this by 1/3 of the neutron mass yields the following;

(42+252)*0.939565378 Gev/3= 92.077407044 GeV

When we take the ratio of the actual Z boson mass to this calculated value we obtain 0.99033631.

The accepted value for the W boson mass is as follows.

W boson 80.385±0.015 GeV/c2 (2)

If we take the 3rd and 4th layer of the sphere packed cuboctahedron structure we have 92 and 162 spheres. Multiplying this by 1/3 of the neutron mass yields the following;

(92+162)*0.939565378 Gev/3= 79.5498686 GeV

When we take the ratio of the calculated value to the actual mass of the w boson we obtain 0.98961085

It is interesting that the Z boson and W boson would use different layers for calculating their masses. It is also interesting that the measured values are nearly symmetrical with the calculated values. That this is so is a freakish accident or z and w bosons are connected to a cuboctahedron structure.

Bottom Quark and Top Quark

Actual Bottom quark mass 4.18 GeV

If we take the 0th and 1st layer of the sphere packed cuboctahedron structure we have 1 and 12 spheres. Multiplying this by 1/3 of the neutron mass yields the following;

Cuboctahedron Layer 0 + Layer 1 = (1+12)*0.939565 Gev/3= 4.07 Gev

When we take the ratio of the calculated mass to the actual measured value of the Bottom quark mass we obtain 4.07/4.18=0.974

Higgs Like Fluctuation at 240 GeV Possible Evidence for Sphere Theory's Cuboctahedron Structure of Hubble Sphere Universe

Actual Top Quark mass 173.4 Gev

If we take the 2nd 3rd 4th, and 5th layer of the sphere packed cuboctahedron structure we have 42, 92, 162, and 252 spheres. Multiplying this by 1/3 of the neutron mass yields the following;

(42+92+162+252)*.939565378 Gev/3= 171.627 Gev

When we take the ratio of the calculated value to the actual measured value of the Top quark mass we obtain 171.627/173.4=0.9898

It is interesting that the bottom quark and top quark would use different layers for calculating their masses. It is also interesting that the measured values are nearly symmetrical with the calculated values. That this is so is a freakish accident or bottom quark and top quark are connected to a cuboctahedron structure. Note that the ratio of the bottom quark and top quark masses, to the calculated values are not as equal at the w and z boson.

Higgs Bosons

The mass of the Higgs is not well defined, but two values are being discussed. Which I have quoted from the following article(4)

Higgs upper mass boson 126.6±0.3±0.7 GeV/c^2(4)

Higgs lower mass boson 123.5±0.9+0.4-0.2 GeV/c^2(4)

If we take the 4th and 5th layer of sphere packed cuboctahedron structure we have 162 and 252 spheres. Multiplying this by 1/3 of the neutron mass yields the following;

Cuboctahedron Layer 4 + Layer 5

(162+252)*0.939565378 Gev/3 = 129.66 Gev

When we take the ratio of the actual upper measured value of the Higgs mass to the calculated we obtain 126.6/129.66=0.9764

Or alternate version

If we take the 2nd and 6th layer of sphere packed cuboctahedron structure we have 42 and 252 spheres. Multiplying this by 1/3 of the neutron mass yields the following;

(42+362)*0.939565 Gev/3 = 126.53 GeV

When we take the ratio of the actual lower measured value of the Higgs mass to the calculated we obtain 123.5/126.53=0.9761

It is interesting that the upper and lower Higgs mass would use different layers for calculating their masses. It is also interesting that the measured values are nearly symmetrical with the calculated values. That this is so is a freakish accident or bottom quark and top quark are connected to a cuboctahedron structure. Note that the ratios are almost identical. The cuboctahedron layers can be combined in a number of ways that result in values that are close to the measured values of the mass of the Higgs.

3. Discussion

To my knowledge there is no mainstream proposal for the mass of the bosons or the large mass quarks. The, strong, correlations of the layers of the cuboctahedron, with the masses of these particles, on multiple levels could be reason for studying this relationship further. It seems clear, that a Buckminster Fuller, cuboctahedron/vector equilibrium structure of the universe, is a possibility.

This paper proposes that the correlation with the 4th, 5th, and 6th layers of the cuboctahedron and the Higgs-Like fluctuation at 240 GeV is too much of a coincidence to ignore. It is also interesting that the Higgs mass upper and Higgs mass lower shown in section II above also include 4th, 5th, or 6th layers in their mass. Congratulations to Tony Smith (5) for his amazing prediction. I think Tommaso Dorigo will finally lose his wager. Congratulations to Philip Gibbs for noting this accomplishment on his Twitter and Facebook account.

Please note that the masses of the top quark and the sum of the masses of the w and z boson are nearly identical. While this has not gone unnoticed in the past it seems to be serendipitous that a cuboctahedron layer combination was found for each.

In the future further study will be given to the difference in the calculated masses and the actual values. It is hoped that the values of the masses will be known to a greater extent to help this further study progress.

4. References

1) http://vixra.org/pdf/1601.0234v4.pdf

2) J. Beringer et al. (2012). "2012 Review of Particle Physics - Gauge and Higgs Bosons". Physical Review D 86: 1.

3) http://www.grunch.net/synergetics/sphpack.html

4) http://profmattstrassler.com/2012/12/17/two-higgs-bosons-no-evidence-for-that/

5) http://www.science20.com/tommaso_dorigo/an_atlas_240_gev_higgslike_fluctuation_meets_predictions_from_independent_researcher-225221