# IN SEARCHING FOR HIGGS BOSON ("GOD PARTICLE") <u>Higgs Boson HSBKM – generated</u> vs <u>Higgs Boson LHC – generated</u>

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HSBKM-generated  (HSBKM = Human System Biology-based Knowledge Management model framework)	<u>LHC-generated</u> (LHC = Large Hadron Collider)
Top Down Mechanism:  "Inverted Paradigm Method" by doing a kind of "reverse enginnering" based on "of proof" to a Knowledge-intensive body of Knowledge Management (KM) as applied science (Knowledgeable Science) for the benefit of basic science (Physics) development - http://bit.ly/pOSGBt	Bottom Up Mechanism:  "Deducto – Hypothetico – Verificative" scientific mind set principles (Scientific Knowledge) - http://bit.ly/pOSGBt
<ul> <li>Performed by "Mobee Knowledge Services"         http://mobeeknowledge.ning.com and http://gravatar.com/mdsanto , Jakarta – Indonesia     </li> <li>Using "Human System Biology-based Knowledge Management (HSBKM)" model framework and "Mobee Knowledge Competency Capabilty Maturity (MKCCM)" model of KM metrics as our "lab and learning-workplace" platform since 2009 to generate and to develop theoretical constructs of Physics</li> </ul>	<ul> <li>Performed by "CERN – The European Organization for Nuclear Research"         http://public.web.cern.ch/public/,         Geneve 23 – Switzerland     </li> <li>Using "Large Hadron Collider (LHC)" to test high-energy physics theories like the Higgs boson. Essentially, LHD is a "Big Bang Machine", a Super Proton Synchrotron built in a tunnel roughly 12.5 feet in diameter that stretches 17 miles in circumference. It lies several hundred feet below the France-Switzerland border near Geneva, Switzerland.</li> </ul>
Subjects investigated : Nature Knowledge Continuum + Higgs Field :	Subjects investigated :  Higgs Field :

- Nature Knowledge representing quantum and classical Nature Consciousness as the fabric of Universe beside Energy and Matter with Nature Knowledge Value (KV) as scaling absolute ratio ranging from 10<sup>-38</sup> (Planck Number) through infinity
- 2. The "Ocean" of Knowon, the 5<sup>th</sup> fundamental force as a hypothetical massless and independent to SpaceTime (IST) particle containing consciousness element factor (CEF) with speed of entanglement functioning as "psychic / consciousness mediating particle" counterparting each other with Graviton, the 4<sup>th</sup> fundamental force as "somatic mediating particle" to give shape of SpaceTime within Higgs Field by looking the (smart) Universe as psycho-somatic entity paradigm
- 3. We strongly believed that cosmic gravitional wave background (GWB) as well as cosmic neutrino background (CNB) by reasonable assumptions, postulated as "psycho-somatic" main sources (*Graviton* and *Knowon*) going toward target loci in the universe containing "Nature DNA" or "Knowledge with Nature Consciousness" (KNC)

- 1. The Higgs mechanism was incorporated into modern particle physics by <u>Steven</u> <u>Weinberg</u> and <u>Abdus Salam</u>, and is an essential part of the <u>standard model</u>. In the standard model, at temperatures high enough so that electroweak symmetry is unbroken, all elementary particles are massless. At a critical temperature, the symmetry is spontaneously broken, and the <u>W and Z bosons</u> acquire masses. (EWSB, ElectroWeak Symmetry Breaking, is an abbreviation used for this.)
- ... after symmetry breaking, these three of the four degrees of freedom in the Higgs field mix with the W and Z bosons, while the one remaining degree of freedom becomes the <u>Higgs boson</u> – a new scalar particle.

( http://bit.ly/ueXfSa)

## **Hypothetically defined Higgs Boson:**

- Graviton (4<sup>th</sup> Fundamental Force) and Knowon (5<sup>th</sup> Fundamental Force) counterparting each other as mediating / force carrier particle acting as living psycho-somatic Higgs Boson (with KV=10<sup>-38</sup>)
- The features of Dependent to Space Time (DST) in *Graviton* and Independent to Space Time (IST) in *Knowon* within Higgs Boson particle representing the prominent quantum superposition behavior of Higgs

## **Hypothetically defined Higgs Boson:**

 W,Z (3<sup>rd</sup> Fundamental Force) as mediating / force carrier particle obtaining Higgs Boson particle

# Quantum Ecosystem Quantum Ecosystem • Derived from KM-generated Physics of the Universe ( <a href="http://t.co/7qHeHdJe">http://t.co/7qHeHdJe</a>) a

Derived from KM-generated Physics of the Universe ( <a href="http://t.co/7qHeHdJe">http://t.co/7qHeHdJe</a>) a constant factor written as "k" ranging from 0.0 – 1.0 applied to Mass – Energy Equivalence or the equation E = mc2 to be written as E = k mc2. The "k" = 1.0 representing the highest entropy of certain Knowledge loci in the Universe

### The Metrics

- Knowledge Value (KV)
- "k" constant factor

### The Metrics

Giga electron Volt (GeV)

## **Prediction of searching**

...."k" approaches 0.0 such as the ecosystem of Higgs Boson, will make all scientific efforts practically a "mission impossible". We dare to say, almost impossible to any scientific effort goes beyond "our illusion dream land" with "k" = 1.0 to leap into "absolute dream land" with "k" less than 1.0 or practically = 0.0 considering that "..... space-time is only the notion of human being in the universe to accommodate the existence of Matter and Energy.

(**Md Santo** – <a href="http://bit.ly/umS2Xi">http://bit.ly/umS2Xi</a> - Knowledge Value (KV) – "K" Constant relationship diagram generated from Human System Biology-based Knowledge Management (HSBKM) model framework )

## **Prediction of searching**

...Having already combined all data for 2010 and 2011 from more channels, CMS showed they now exclude all possible Higgs masses from 127 to 600 GeV with a 95% confidence level, leaving only a narrow window open between 114-127 GeV. ATLAS excludes masses above 131 GeV up to 453 GeV with the same confidence level, but also between 114-115.5 GeV.

But it is still premature despite encouraging signs. More data will be collected in 2012. The answer will then become unambiguous: we will either discover the Higgs or rule it out completely. If the small effects presented today keep growing, we will then see the Higgs do its little song and dance.

(Pauline Gagnon – <a href="http://bit.ly/tQVuID">http://bit.ly/tQVuID</a> – Twitter: @GagnonPauline - CERN – Geneve, Switzerland)

### **Minimal References Required**

- <a href="http://bit.ly/uH9DCA">http://bit.ly/uH9DCA</a> "Basic structure of Human System Biology-based Knowledge Management (HSBKM) model framework and the development"
- <a href="http://bit.ly/pKAO8U">http://bit.ly/pKAO8U</a> "KM model framework by Nature"
- http://t.co/7qHeHdJe "Physics of the Universe revealed by Knowledge Management model framework"
- <a href="http://bit.ly/umS2Xi">http://bit.ly/umS2Xi</a> "Knowledge Value (KV) "k" Constant relationship diagram generated from Human System Biologybased Knowledge Management (HSBKM) model framework
- http://bit.ly/sASiiq Md Santo, M.Arsali : "Impact of Human System Biology-based Knowledge Management (HSBKM) model framework on Theoretical Physics", The International Conference on Mathematics and Sciences Surabaya Institute of Technology (ITS), Indonesia, October 12 13, 2011

### **Minimal References Required**

• (not listed)

# **Conclusions**:

1. LHC – generated method (through **GeV** as the metrics) <u>will</u> reveal the existence of Higgs Boson physically

# and mutually independent with:

HSBKM – generated method (through KV and "k" constant factor as the metrics) <u>already</u>
 <u>revealed</u> the behavior as well as the features of Higgs Boson instead of their function in giving mass to particles

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