

Standard Physical Model and Beyond in Manas



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Abstract : Since time memorial fundamental particle /god particle/ Bramh-kan has been a matter of anxiety. In various religious books of different sect this particle is discussed. The recent achievement in Standard Physical Model at CERN and consequent award of Nobel Prize to the findings further excited the globe for discussion on the matter. The present article presents the decoded version of god particle in Tuls-Manas and its similarity with CERN findings. The interesting part of the article is that the findings of CERN matches to that described in Manas with a clear lead shown in the field of fundamental particle. Findings of Manas Bramh-kan can guide the researchers interested in Higgs boson particle to a great extent. Manas guide lines for lead work are mentioned in the last of the article.

Introduction

The fundamental particle has been the matter of inquisitiveness for human kind since times immemorial. The work on Standard Physical Model started in 1964 in several countries and labs across globe. However the modern CERN experiment was performed in 2012.

Tulsi Ramcharitmanas has been exhaustively studied and researched for social, cultural and spiritual aspects; a comprehensive exploration from the perspective of science, bringing equality and prosperity is recently done which is still continuing.

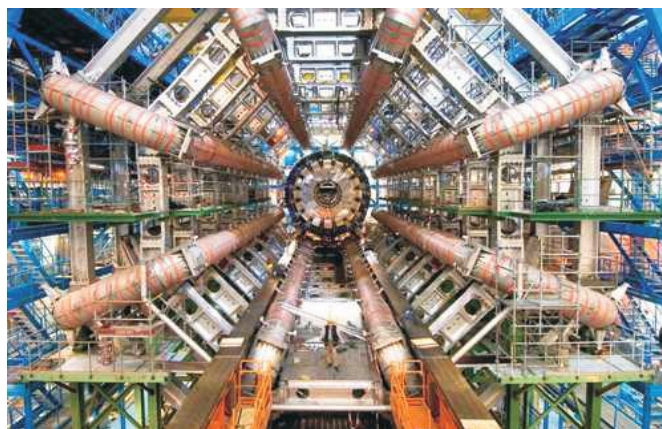
The two books "Ramcharitmanas-Ocean of science" and "Vande vishuddh vigyanau, Ramcharitmanas", have explored the tradition of Rishie's and established that India is a repository of science since several centuries.

The present script also enables the experts to understand the fundamental particle beyond Standard Physical Model through Manas. Where, Bramh kan(God particle) has been dealt with very significantly and it has been established as an omniscient and omnipotent particle/power. Its attributes, genesis, transformations and resultants are described very coherently. Starting from the definition of atom, electron, proton, neutron, their interrelationship,

inter-conversion from one another, orientation of particles in the atom, conformation, inter-action with other physical and chemical factors has been described. Mechanism of inter-conversion and interaction with other moieties, their field of influence, coupling mechanism etc. are described in detail.

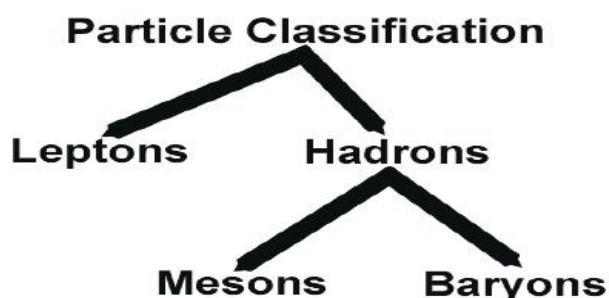
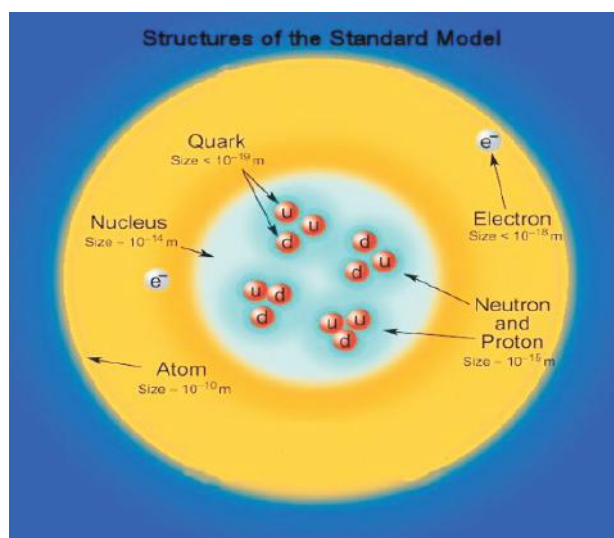
The appearance of fundamental particle in the Sun's family along with its components and primordial energy, its physical, chemical and biological behavior, its power and authority and dimensions are illustrated. The comparison between Standard Physical Model, Higgs boson and Bramh-kan has been elaborated. Discussed fundamental particle beyond Standard Physical Model may lead the researchers to work further in the subject. It reveals that India had very deep knowledge in the field of particle physics even in 16th century. The author wishes to draw the attention of scientists in general and nuclear physicists in particular for a new success in the field of fundamental particle.

About 13.82 billion years ago after the Big Bang spontaneous symmetry breaking happened in 10^{-11} seconds. The event violated the symmetry in the sea of energy unleashed by the Bang and gave rise to particles with different masses.



In order to understand the fundamental particle modern CERN experiment was started in 1964 on Standard Physical Model. This yielded the concept of 6 Bosons, 6 Leptons and 6 kinds of Quarks along with 49 other particles, comparably of less significance.

The year 2012 was declared as the year of God Particle. On invention of two particles sized 123.5 GEV and the other 126.6 GEV (Gega electron volts), these particles were probably the unknown last part of standard model.



Mechanism of Formation of Sub-Atomic Structures

The experiment proves that Higgs particles contribute in the development / synthesis / formation of other sub-atomic structures. These two hypothetical smallest particles are being named as god particles, though the inventors never called it as God-particle. This dream project of Large Hadrons Collider had support of almost four thousand scientists across the globe. In the process out of 1000 billion collisions only one Higgs-boson particle was observed, giving an idea of only 4 percent matter with 96% dark matter.

In the Higgs-boson particle's studies, matter was found only in one particle while the other particle contained only charge. Mr.Higgs and Mr. Englert attributed these masses to the Higgs field, an invisible field of energy pervading the universe. The smallest disturbance in this field was encapsulated as particles move through this field. Higgs-boson couple with them in varying degrees; stronger the coupling, more the retardation of the particles motion through the field and greater it's mass.

This mechanism has come to be known as the Higgs boson Brout mechanism, for which Mr. Higgs and Mr. Englert have been awarded Nobel Prize as well.

Usually Tulsi-Ramcharitmanas is considered as the finest Mahakavya in the literature and treated as a Religious and social script. However, on careful observation and decoding, it leads to a much targeted science book encompassing all branches of modern science. The 4th shloka of first chapter Balkanda says;

वन्दे विशुद्धविज्ञानौ || बाल काण्ड श्लोक 4

Worship pure science. For well being of the globe Tulsi opted science as a tool.

बिनु बिग्यान कि समता आबइ | कोइ अवकास कि नभ बिनु पावइ ||

Science popularization was done through chanting of Manas in a poetic way using common man language and stage play of Ramlila.

The synopsis of Manas states that the four ends of human existence, viz; worldly riches, religious merit/matter characteristics, enjoyment and liberation, the reasoned exposition of jnana (knowledge of God particle in His absolute formless aspect) and vijnanana (systematic knowledge of qualified divinity both with and without form), will be discussed in detail.

अरथ धरम कामादिक चारी | कहब ग्यान बिग्यान बिचारी || बाल काण्ड दोहा 36 चौपाई 5

The last shloka of Manas states that reader would attain glory, purity, bliss, cheerfulness and fortification with Science and Spirituality.

पुण्यं पापहरं सदा शिवकरं विज्ञान भक्ति प्रदं || उत्तरकाण्ड श्लोक 130 ख

On scientific analysis of Manas it is quite obvious that there is a description of God particle "Bramh kan" which participates in the worldly affairs from creation, conservation & dissolution and origin to evolution. The Bramh-Kan is the fundamental

particle of animate and inanimate world. Thus, it is the basic ingredient of all worldly matter and energy is the very basis of all the actions and chemical reactions. This analysis and analogy described in Manas for creation, evolution and dissolution could be very well compared with the modern science, such as particle physics, atomic physics, atomic chemistry, molecular biology and biological evolution. This shows the scientific temper, scientific level and achievements of Indian science well before 16th century.

Similar to the Higgs field Manas says that in obedience to whose fiat maya/reaction brings forth multitudes of universe in the quarter of a second.

लव निमेष मुहुँ भुवन निकाया । रचइ जासु अनुसासन माया ॥

बाल काण्ड दोहा 224 चौपाई 2

The particle/Bramh-Kan can be ascertained as fundamental particle only when it qualifies as omniscient, all pervading and imperishable. These attributes could be proven by various scientific methods of synthesis, disintegration, and transformation along with relationship between animate - inanimate and qualified - unqualified ones.

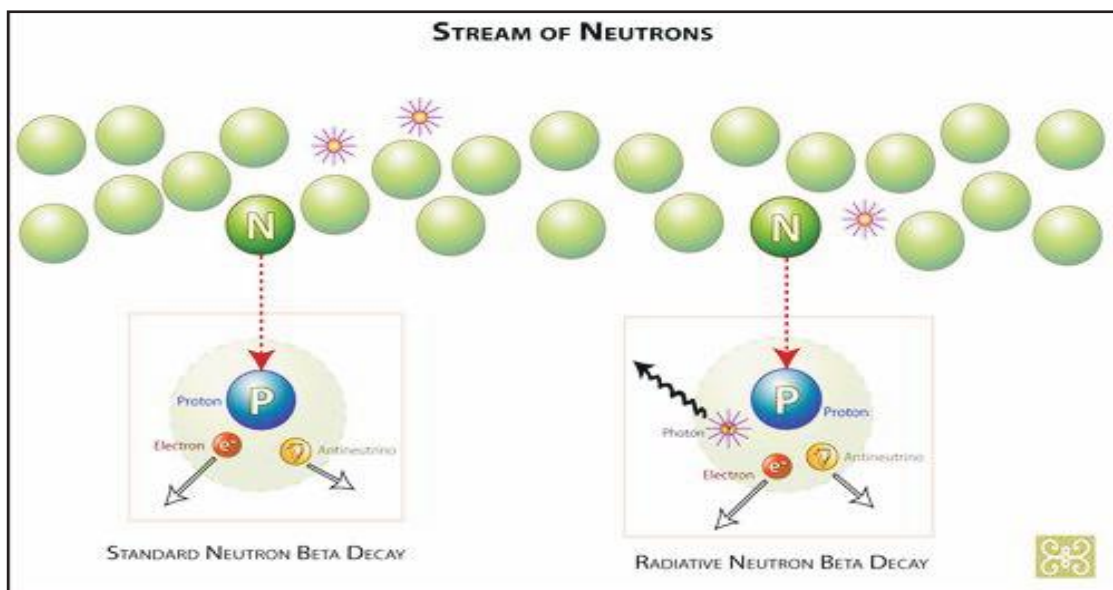
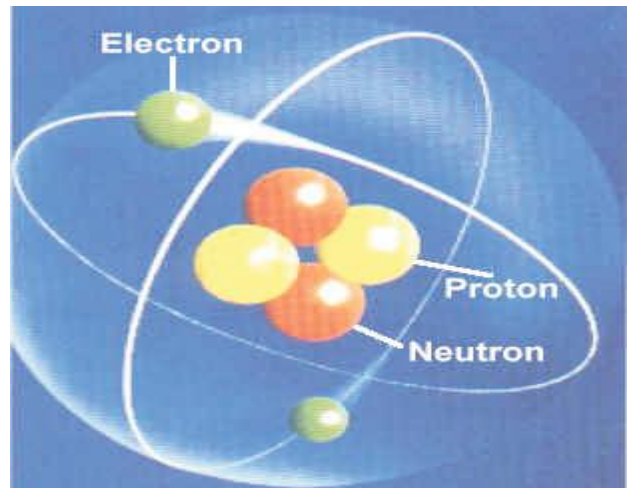
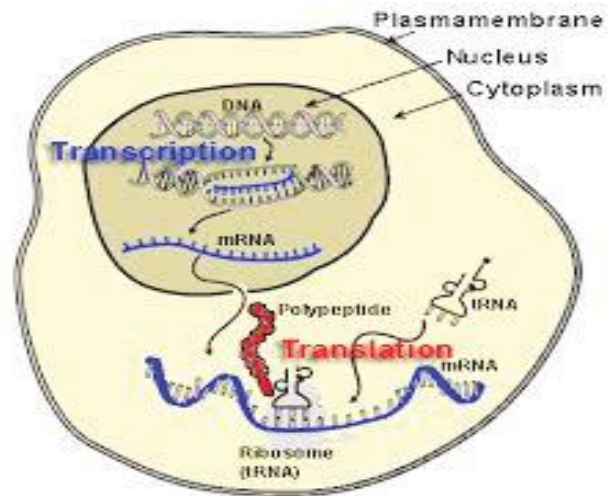
Methodology

The detailed description of similar two particles is given in Manas. However, the origins of such particles were discovered by observations under Sun by Rishis. The description of Bham-kan 'God particles' are described in discrete form in Manas.

However, in Manas the atom /Parmanu, electron, proton and neutron are explained in a well way along with their inter-relationships. The two other particles are also described in detail. The measure of time taken by a Sun beam in passing matter is named as Parmanu.

लव निमेष परमानु जुग बरष कलप सर चंड ।

भजसि न मन तेहि राम को काल जास कोदंड ॥ लंका काण्ड दोहा 0



While the other component which is consistent in its behavior, present in all is alike to all, imperishable and impartial by nature/neutral can be compared to neutron.

तुम्ह समरूप ब्रह्म अबिनासी । सदा एकरस सहज उदासी ॥

The ever unchangeable, integral, devoid of material properties, unborn immutable, invincible, unailing in power and full of compassion is comparable to electron,

अकल अगुन अज अनध अनामय । अजित अमोघसक्ति करुनामय ॥
लंकाकाण्ड दोहा 109 ख चौपाई 3

The third part of an atom is described as manifest as all, pervade all, dwell in the heart of all therefore protects atom every where is proton.

सर्व सर्वगत सर्व उरालय । बससि सदा हम कहूँ परिपालय ॥
उत्तरकाण्ड दोहा 33 चौपाई 3-4

For me they are all centered in you. How ever, who is devoted to you in thought, word and deed, should he be abandoned, ocean of grace.

मोरें सबइ एक तुम्ह स्वामी । दीन बंधु उर अंतरजामी ॥

मन क्रम बचन चरन रत होई । कृपासिंधु परिहरिअ कि सोई ॥ अयोध्या काण्ड दोहा 71 चौपाई 3&4

My dear son, Sita is your mother and while Rama who loves you in every way is your father. Neutron says that you (proton) are my lord and it is known to you as well, and when I am obedient to you (means neutron is obedient to proton) you can not abandon me (the proton cannot sustain without neutron). Neutron is originated from electron-positron thus is indicated as electron and proton is mother and father of neutron, and there is suggestion that neutron must accompany proton, saying it will perish.

तात तुम्हारि मातु बैदेही । पिता रामु सब भाँति सनेही ॥

Avadh is there where Rama dwells; there alone is the day where there is sunlight.

अवध तहाँ जहँ राम निवासू । तहँइँ दिवसु जहँ भानु प्रकासू

If Sita and Rama are really proceeding for jungle, you have no business in Ayodhya.

जौ पै सीय रामु बन जाहीं । अवध तुम्हार काजु कछु नाहीं ॥ अयोध्या काण्ड दोहा 73 चौपाई 1&2

God particle (proton + energy) does the same by which electron Sita and neutron (Laxmana) are protected and happy/stress less. Whenever neutron is under stressing it always actively works for removal of the problem. It says that co-generated brother i.e. proton and neutron is rarely available both are generated from the same ancestor.

सीय लखन जेहि बिधि सुखु लहहीं । सोइ रघुनाथ करहिँ सोइ कहहीं ॥

कहहिँ पुरातन कथा कहानी । सुनहिँ लखनु सिय अति सुखु मानी ॥ अयोध्या काण्ड दोहा 140 चौपाई 1

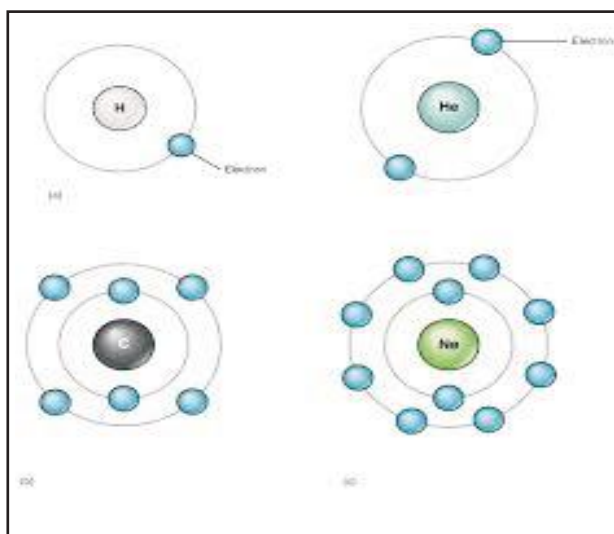
अस बिचारि जियँ जागहु ताता । मिलइ न जगत सहादर भ्राता ॥ लंकाकाण्ड दोहा 60 ख चौपाई 2&5

Similarly the neutron disintegrates when positrons are under stress and it never allows proton to be under stress or in distress rather is very kind hearted for proton/Rama. So is done by electrons of the atom to support proton. This is also on the basis of standard physical model where it is stated that proton and neutrons are fermions with values of the strong isospin quantum number, so two proton and two neutrons can share the same space wave function since they are not identical quantum entities. They sometimes are viewed as two different quantum states of the same particle, the nucleon. Two fermions, such as two protons, or two neutrons or a proton⁺ neutron (the deuteron) can exhibit bosonic behavior when they become loosely bound in pairs.

May your devotion to the feet of Sita and Rama be constant and untainted and ever new? Means the duty of neutron is to protect the electron and proton to utmost possible.

रति होउ अबिरल अमल सिय रघुबीर पद नित नित नई ॥ अयोध्या काण्ड छन्द

The 49 particles of standard physical model of less significance have been described as a kind of quarks are comparable to 49 varieties of winds each presided over by a distinct God cumulatively called Maruts which were stimulated during fire in Lanka by controller of wind energy named Pavan Putra Hanuman. Role of each one of the 49 less significant particles, needs



to be explored for various applications. Since it is very clear from Manas that these 49 Maruts do take part in enhanced energy liberation/bluster each one of these are controlled separately.

हरि प्रेरित तेहि अवसर चले मरुत उनचास ।

अट्टहास करि गर्जा कपि बद्धि लाग अकास ।। सुन्दर काण्ड दोहा 25

This also signifies that solar energy, wind energy and hydro/tidal energy perform the functions similarly. Because the Solar energy presided over by its lord Sun/Rama, the Pawan/wind presided over by its lord "Pawan putra- Hanumana" and tidal energy presided over by its lord, Varun are reported to perform the functions when high energy is required.

Maruts do not function on their own but need induction to release energy, all the 49 Maruts were stimulated by God Particles during fire in Lanka. Thus stimuli is the matter of further research in this field. As Jamban induced Hanumana.

A nuclide (from nucleus) is an atomic species characterized by the specific constitution of its nucleus, i.e., by its number of protons Z , its number of neutrons N , and its nuclear energy state.^[1]

Stability of nuclides by (Z,N) :

Black – stable (all are primordial)

Red – primordial radioactive

Other – radioactive, with decreasing stability from orange to white

Origins of naturally occurring nuclides

Natural radionuclides may be conveniently subdivided into three types.

First, those whose half-lives $T_{1/2}$ are at least 2% as long as the age of the Earth (for practical purposes, these are difficult to detect with half-lives less than 10% of the age of the Earth) (4.6×10^9 years). These are remnants of nucleosynthesis that occurred in stars before the formation of the solar system

The second group of radionuclides that exist naturally consists of radiogenic nuclides such as ^{226}Ra ($T_{1/2} = 1,602$ years), an isotope of radium, which are formed by radioactive decay. They occur in the decay chains of primordial isotopes of uranium or thorium. Some of these nuclides are very short-lived, such as isotopes of francium. There exist about 51 of these daughter nuclides that have half-lives too short to be primordial, and which exist in nature solely due to decay from longer lived radioactive primordial nuclides.

The third group consists of nuclides that are continuously being made in another fashion that is not simple spontaneous radioactive decay (i.e., only one atom involved with no incoming particle) but instead involves a natural nuclear reaction. These occur when atoms react with natural neutrons (from cosmic rays, spontaneous fission, or other sources), or are bombarded directly with cosmic rays. The latter, if non-primordial, are called cosmogenic nuclides. Other types of natural nuclear reactions produce nuclides that are said to be nucleogenic nuclides.

Stability of nuclides by (Z,N) :

Black – stable (all are primordial)

Red – primordial radioactive

Other – radioactive, with decreasing stability from orange to white

Also there is a description of 51 'Shakti Peeths' established in India which do represent the matter and charge (energy) with established relationship. In Manas it is said that the energy form is transformed as per the source of energy and fits into its garb.

Nuclear properties in modern physics states the collection of 288 nuclides which are called Primordial nuclei, they are long lived enough to be present from the birth of the solar system. Finally, additional 51 short lived nuclids are known to occur naturally as daughter products of primordial nuclides decay or else as products of natural energetic processes on earth. The second group of radionuclides that exist naturally consists of radiogenic nuclides such as ^{226}Ra ($T_{1/2} = 1,602$ years), an isotope of radium, which are formed by radioactive decay. They occur in the decay chains of primordial isotopes of uranium or thorium. Some of these nuclides are very short-lived, such as isotopes of francium. There exist about 51 of these daughter nuclides that have half-lives too short to be primordial, and which exist in nature solely due to decay from longer lived radioactive primordial nuclides.

सती बिधात्री इंदिरा देखीं अमित अनूप ।

जेहिं जेहिं बेष अजादि सुर तेहि तेहि तन अनुरूप ।। बाल काण्ड दोहा 54

In the past Rishis and sages were consistently working on Bramh-Kan, annual conferences were being organized regularly in Allahabad at Bhardwaj Ashram, near confluence of Ganga and Yamuna. The sages gathered here, and proceeded to holy bath. There was a great rejoicing every year and having performed their ablutions while the Sun stays in Capricorn, the hosts of sages disperse after a month of deliberation.

एहि प्रकार भरि माघ नहाहीं । पुनि सब निज निज आश्रम जाहीं ॥

प्रति संबत अति होइ अनंदा । मकर मज्जि गवनहिं मुनिबृदा ॥ बाल काण्ड दोहा 44 चौपाई 1

They used to discuss the nature of Bramh-kan (the supreme eternal), the percepts of religion (content in the matter) and the classification of fundamental entities and expatiate on devotion of the lord coupled with spiritual enlightenment and dispassion. The attributes of Bramh, methods of studies up to elemental level were being undertaken and deliberated.

ब्रह्म निरूपन धरम बिधि बरनहिं तत्व बिभाग ।

कहहि भगति भगवंत कै संजुत ग्यान बिराग ॥ बाल काण्ड दोहा 44

Omniscience of God Particle and Attributes

The question was what should be the characteristic of Bramh-kan/God particle? It was said that whatever beings, animate or inanimate there are in the universe, recognizing them one and all, as consisting of Seey-Ram /God particles. Further the priority to assign Bramh was to ensure its omniscience, its availability in all forms of life and matter, as stated

जड़ चेतन जग जीव जत सकल राममय जानि ।

बदउँ सब के पद कमल सदा जोरि जुग पानि ॥ बाल काण्ड दोहा 7 ग

सीय राममय सब जग जानी । करउँ प्रनाम जोरि जुग पानी ॥ बाल काण्ड दोहा 7 घ 1

You are omniscient. Similarly electron and neutron do help in similar way. On reduction in electron proton releases positrons and tries to stabilize the situaion.

पूँछेहु मोहि कि रहौं कहँ मैं पूँछत सकुचाउँ ।

जहँ न होहु तहँ देहु कहि तुम्हहि देखावौं ठाउँ ॥ अयोध्या काण्ड दोहा 127

The other question that arises is whether a single attribute of omniscience is adequate for a particle to be treated as fundamental particle or Bramh-kan. If not then what? The other feature is its imperishability and capability of inducing life. Brahma is one, all pervading and imperishable; he is all truth consciousness and a compact mass of joy.

ब्यापकु एक ब्रह्म अबिनासी । सत चेतन घन आनँद रासी ॥ बाल काण्ड दोहा 22 चौपाई 3

In furtherance the all pervading Brahma (absolute)/energy that are imperceptible and imperishable, the embodiment of consciousness and bliss, at once the sum of all attributes. Energy dwells in atom in the form of electron, proton and neutron. Proton is the centre of all attributes and neutron states like neutral irrespective of having charge, mass and energy -, +, +_.

करहिं जोग जोगी जेहि लागी । कोहु मोहु ममता महु त्यागी ॥

ब्यापकु ब्रह्म अलखु अबिनासी । चिदानंदु निरगुन गुनरासी ॥ बाल काण्ड दोहा 340 चौपाई 3

The other question that arises is with above characteristics which satisfy the need of Bramh-kan, what makes the unqualified Brahma assume a qualified form? Or it is no other than the indestructible Brahma, who is consciousness itself and who, though bereft of all, yet dwells in the heart of all.

$M^+ + E = P^+ N = M + E$ Where E= Electron/Energy, P=Proton, N= Neutron M= Matter with +ve charge.

प्रथम सो कारन कहहु बिचारी । निर्गुन ब्रह्म सगुन बपु धारी ॥ बाल काण्ड दोहा 109 चौपाई 2

राम ब्रह्म चिनमय अबिनासी । सर्व रहित सब उर पुर बासी ॥

नाथ धरेउ नरतनु केहि हेतू । मोहि समुझाइ कहहु बृषकेतू ॥ बाल काण्ड दोहा 119 चौपाई 1

Cause of Conversion from Unqualified to Qualified

Further question was placed why the supreme eternal, which is all pervading, unbigoted, without parts, free from desire, beyond maya, beyond all distinction and which not even the Vedas can comprehend why it assumes the body?.

ब्रह्म जो ब्यापक बिरज अज अकल अनीह अभेद ।

सो कि देह धरि होइ नर जाहि न जानत बेद ॥ बाल काण्ड दोहा 50

Then the other question strikes the mind for ascertaining Bramh, besides its capability of its exhaustive transformation. As it is said that there is no difference between qualified divinity and the unqualified Brahma; so declare the sages and men of wisdom. That which is attribute less and formless, imperceptible and unborn, becomes qualified under the influence of devotee's love/demand for energy or demand for electron. How can the absolute become qualified? In the same way as water and the hail stone are non-different in substance but do differ in the energy level, visibility and shape. Water on its own does not have shape but acquires the shape of the vessel it is kept in; whereas hail stone does. This leads to a concept that less

energy allows stability and additional energy to dynamism. To touch upon the mystery Manas clarifies that

सगुनहि अगुनहि नहिं कछु भेदा । गावहिं मुनि पुरान बुध बेदा ।। बाल काण्ड दोहा 115 चौपाई 1

जो गुन रहित सगुन सोइ कैसे । जलु हिम उपल बिलग नहिं जैसे ।। बाल काण्ड दोहा 115 चौपाई 3

There is little difference between these above discussed forms but for the quantum of energy. This quantum of energy allows change of state in the matter as mentioned in the example of water. The water is one of the five components of the body as stated below. Basically all these five components ether, fire, water, air, earth do form the body but are dull in themselves.

अनल समीर गगन जल धरनी । इनकर नाथ सहज जड़ करनी ।। सुंदर काण्ड दोहा 58 चौपाई 1

Process of Condensation

It is Maya/reaction which brought them forth for the purpose of creation under an impulse from you

The above components when combine in a definite orientation leads to body formation and consequently forms the basis of life. Which indicates why unqualified form transforms to qualified form. The unfolding of the sublime view that sees God particles in every facet of creation encompassing universal love from the initial microscopic perception of "all are mine and my aspect" is the essence.

छिति जल पावक गगन समीरा । पंच रचित अति अधम सरीरा ।। किष्किन्धा काण्ड दोहा 10 चौपाई 2

तव प्रेरित मायाँ उपजाए । सृष्टि हेतु सब ग्रंथनि गाए ।। सुन्दर काण्ड दोहा 58 चौपाई 1-2

अगुन अखंड अनंत अनादी । जेहि चिंतहिं परमारथबादी ।। बाल काण्ड दोहा 143 चौपाई 2

This world with all its varieties of life both moving and motionless is a creation of my Maya. I love them all, because all are my creatures. But human beings are dearest to me of all. The energy source and energy rests in the single particle. Therefore initial use of MY is substituted by MM which denotes that source of energy(M) and energy(Y) is in the same particle and due to its own reaction MAYA/Adi shakti(A is association of energy source/matter with energy)the world is created, conserved and dissolved. Also the supra energy is created by the reaction in energy source itself.

मम माया संभव संसारा । जीव चराचर बिबिध प्रकारा ।।

सब मम प्रिय सब मम उपजाए । सब ते अधिक मनुज मोहि भाए ।। उत्तरकाण्ड दोहा 85ख चौपाई 2-3-4

In a similar manner, all animate and inanimate beings, including the sub-human species, gods, men and demons, in short the whole of universe is my creation and I am equally compassionate to all. All are mine and are my aspects.

एहि बिधि जीव चराचर जेते । त्रिजग देव नर असुर समेते ।।

अखिल बिस्व यह मोर उपाया । सब पर मोहि बराबरि दाया ।। उत्तरकाण्ड दोहा 86 चौपाई 1-4

He who has bodied himself forth for the sake of his devotee/electron seeker is no other than the supreme eternal, who is all pervading and ever free, who is the ruler of all the worlds and the lord of maya /Reaction.

Though these components do form the body still they themselves are made up of Bramh-Kan /God particle and this body formation is independent of its will and potential.

सोइ रामु ब्यापक ब्रह्म भुवन निकाय पति माया धनी ।

अवतरेउ अपने भगत हित निजतंत्र नित रघुकुलमनी ।। बाल काण्ड दोहा 50 छंद

Source of Matter Energy

In order to further clarify the Bramh-Kan (God Particle) Manas states that energy source shall be born as human being along with its part manifestations. It means that one Bramh-Kan and supra-energy will appear together along with other particles i.e. there will be one particle with energy, while the other particle will contain mass as well. My primordial energy Maya has brought forth the universe. While Maya denotes interaction between ingredients, and catalyst (if required) and sharing or fusion of energy under prevailing conditions.

इच्छामय नरबेष सँवारे । होअहउँ प्रगट निकेत तुम्हारें ।।

अंसन्ह सहित देह धरि ताता । करिहउँ चरित भगत सुखदाता ।।

आदि सक्ति जेहिं जग उपजाया । सोउ अवतरिहि मोरि यह माया ।। बाल काण्ड दोहा 151 चौपाई 1-2



The CERN experiment also found two particles one; of 123.5 GEV and other of 126.6 GEV. This indicates that the nuclear particles of atom i.e. proton and neutron are also not fundamental particles rather they are made up of quarks which form several other composite particles called hadrons. In this way proton is a member of Hadrons family which are the fundamental particles. Thus Tulsi emphasized that in the world the only energy source is Bramh-Kan or god particle which liberates energy and enlightens the world. And it is expressed for its various forms and as a controller of the world. Manas says I shall justify all that was uttered by Narada and shall descend with my supreme energy. I will incarnate in Sun's family along with my other integrated constituents and with supra energy.

अंसन्ह सहित मनुज अवतारा । लेहउँ दिनकर बंस उदारा ॥ बाल काण्ड दोहा 186 चौपाई 1

नारद बचन सत्य सब करिहउँ । परम सक्ति समेत अवतरिहउँ । बाल काण्ड दोहा 186 चौपाई 3

तिन्ह कें गृह अवतरिहउँ जाई । रघुकुल तिलक सो चारिउ भाई ॥ बाल काण्ड दोहा 186 चौपाई 3

He who is known universally as the spirit, the form of light, manifests in all forms and is the lord of life as well as of matter. This is mentioned that the whole world contains energy form and God particle, Bramh-kan is the source of energy. The Bramh-Kan is the master of all actions, knowledge and attributes.

पुरुष प्रसिद्ध प्रकास निधि प्रगट परावर नाथ । बाल काण्ड दोहा 116

The world of matter is the object of illumination, while Rama/Bramh-Kan is its illuminator. This Bramh-Kan is the source of origin for all. The energy/supra-energy/ancient energy which is abundantly present in all but is not bounded with them and does change as per need in various forms of matter for its conversion and substitution.

जगत प्रकास्य प्रकासक रामू । मायाधीस ग्यान गुन धामू ॥

जासु सत्यता ते जड़ माया । भास सत्य इव मोह सहाया ॥ बाल काण्ड दोहा 116 चौपाई 4

Structure and Orientation of Matter, energy in Bramh-kan

The root of all worldly beauty and pioneer super energy rests on the left part of the fundamental particle. In other words, transverse section of an atom shows electron/energy on its left side. From a fragment of this particle of whose being emanate countless Lakshmis, Umas and Bramanis (Saraswatis) all of them are mine of virtues and also emanate a number of Sambhus, Viranchis and Vishnus.

बाम भाग सोभति अनुकूला । आदिसक्ति छबिनिधि जगमूला ॥

जासु अंस उपजहि गुनखानी । अगनित लच्छि उमा ब्रह्मानी ॥ बाल काण्ड दोहा 147 चौपाई 2

संभु बिरचि बिष्णु भगवाना । उपजहिं जासु अंस ते नाना ॥ बाल काण्ड दोहा 143 चौपाई 3

She further perceived innumerable satis (consorts of Shiva), consorts of Brahma and Laksmis (Consorts of Vishnu), all peerless in beauty. They conformed in their appearance to the garb in which Brahma and the other gods appeared. In other words energy is transformed from one form to another complementarily to the energy source particle.

सती बिधात्री इंदिरा देखीं अमित अनूप ।

जेहिं जेहिं बेष अजादि सुर तेहि तेहि तन अनुरूप ॥ बाल काण्ड दोहा 54

जो चेतन कहँ जड़ करइ जड़हि करइ चैतन्य ।

अस समर्थ रघुनायकहि भजहिं जीव तै धन्ह ॥ उत्तरकाण्ड दोहा 119 ख

Reverence the feet of Sita and Rama/energy and energy source, who though stated to be different are yet identical just like a word and its meaning or like water and the waves on its surface, and to whom the afflicted are most dear. This clearly denotes that there is only difference of morphs while the other attributes may be common as well, which is illustrated in the following lines. However, there is a change in the electro potential difference as electrons flow from high to low electro potential side. Similarly, flow of water takes place from high altitudes to low side and the same concept is followed by lord Rama/energy who loves poorest the most.

गिरा अरथ जब बीचि सम कहिअत भिन्न न भिन्न ।

बंदउँ सीता राम पद जिन्हहि परम प्रिय खिन्न ॥ बाल काण्ड दोहा 18

Appearance of Energy and Matter

In continuation to this, Tulsi states that in account of energy unqualified and qualified both are alike and are similar to the god particle. But the difference of state between these is like the fire which is hidden in all woods all the time but at the time of burning, fire appears and burns the materials. Means like god particle, energy is omniscient.

अगुन सगुन दुइ ब्रह्म सरूपा । अकथ अगाध अनादि अनूपा ॥

एकु दारुगत देखिअ एकू । पावक सम जुग ब्रह्म बिबेकू । बाल काण्ड दोहा 22 चौपाई 1-2

Bramh-kan (God particle) whether in unqualified or qualified is one, desire less, formless, nameless, and unborn, who is truth, consciousness and bliss. Who is supreme effulgence, all pervading and all formed-it is he who has performed many deeds assuming a suitable form. As stated it is omniscient, it attains the shape and forms the body to perform various desired activities in different life forms.

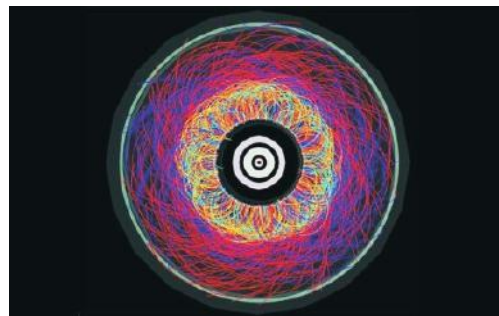
एक अनीह अरूप अनामा । अज सच्चिदानंद पर धामा ॥

ब्यापक बिस्वरूप भगवाना । तेहिं धरि देह चरित कृत नाना ॥ बाल काण्ड दोहा 12 चौपाई 2

The presence of fundamental particles can be ascertained by creating an urge for electron or energy. The two aspects of Brahma should be recognized as akin to fire: the one (absolute) represents fire which is latent in wood; while the other (qualified divinity) corresponds to that which is externally visible.

अग जगमय सब रहित बिरागी । प्रेम तें प्रभु प्रगटइ जिमि आगी ॥ बाल काण्ड दोहा 184 चौपाई 3

Besides creating an action to observe reaction it is established that god particle Bramh-Kan is omniscient but it appears in relation to love that is in high urge of electrons. In case of unqualified terms this process occurs in external electro-potential difference where electrons flow from high potential to low potential. In the qualified forms it takes place inside the body parts with the help of active and passive electron transport to perform metabolic activities while actions and reaction outside the body it is seen in various forms.



हरि ब्यापक सर्वत्र समाना । प्रेम तें प्रगट होहिं मैं जाना ॥

देसकाल दिसि बिदिसिहु माहीं कहहु सो कहाँ जहाँ प्रभु नाहीं ॥ बाल काण्ड दोहा 184 चौपाई 3-4

This unqualified, without shape, unobservable, unborn entity does convert into qualified, shaped form due to demand of devotee/energy.

ब्यापक अकल अनीह अज निर्गुन नाम न रूप ।

भगत हेतु नाना बिधि करत चरित्र अनूप ॥ बाल काण्ड दोहा 205

There is no difference between qualified divinity and the unqualified Brahma-kan. That which is attributes less and forms less, imperceptible and unborn, becomes qualified under the influence of devotee's love/ urge of electron causing chemical reaction leading to formation of matter as happens in photosynthesis.

अगुन अरूप अलख अज जोई । भगत प्रेम बस सगुन सो होई ॥ बाल काण्ड दोहा 115 चौपाई 1

पुँछेहु मोहि कि रहौं कहँ मैं पूँछत सकुचाउँ ।

जहँ न होहु तहँ देहु कहि तुम्हहि देखावौं ठाउँ ॥ अयोध्या काण्ड दोहा 127

Satisfaction/saturation of energy level in an atom is the basis of all bonds. It is not for the need of another atom the one couples with but for its own stability that is the cause of gathering of mass in God particle/Rama and creation of universe.

रामहिं केवल प्रेम पियारा । जान लेहु जो जान निहारा ॥ अयोध्या काण्ड दोहा 136 चौपाई 1

It is the progenitor of the smaller creations

Established it as the very basis of life and being only means of all activities/performance it is supremely dear to all, like child; it is the life of each life, the vitality of the soul.

पूत परम प्रिय तुम सबही के । प्रान प्रान के जीवन जी के ॥ अयोध्या काण्ड दोहा 55 चौपाई 4

All the living beings in the world, do love these boys/the energy source and energy it itself. Because these are the fundamental ingredients of all the bodies and bodily activities.

ए प्रिय सबहिं जहाँ लागि प्रानी । मन मुसुकाहिं रामु सुनि बानी ॥ बाल काण्ड दोहा 215 चौपाई 4

No body has been able to discover His beginning or end. Energy/Bramh-kan walks without feet, hears without ears and performs actions of various kinds even without hands. He enjoys all tastes without a mouth (palate) and is the cleverest speaker though devoid of speech. He touches without a body (the tactile sense), sees without eyes and catches all odors

without a nose (the olfactory sense). His ways are thus supernatural in every respect and his glory is beyond description.

तन बिनु परस नयन बिनु देखा । ग्रहइ घान बिनु बास असेषा ।।

असि सब भाँति अलौकिक करनी । महिमा जासु जाइ नहिं बरनी ।। बाल का. दो. 117 चौ. 2-3-4

बिनु तप तेज कि कर बिस्तारा । जल बिनु रस कि होइ संसारा ।। उत्तर काण्ड दोहा 89 ख चौपाई 3

There is nothing in this world which cannot be attained through penance. He further related at countless marvelous stories connected with the creation, maintenance and dissolution of the universe.

उद्भव पालन प्रलय कहानी । कहेसि अमित आचरज बखानी ।। बाल काण्ड दोहा 162 चौपाई 4

Mode of Function

By virtue of penance the creator creates the universe, Vishnu protects the whole world, Sambhu brings about dissolution, Sesa bears the burden of the earth on the head and In fact, the entire creation rests on penance.

तपबल तें जग सृजइ बिधाता । तपबल बिष्नु भए परित्राता ।।

तपबल संभु करहि संघारा । तप तें अगम न कछु संसारा ।। बाल काण्ड दोहा 162 चौपाई 1-2

तप अधार सब सृष्टि भवानी । करहि जाइ तपु अस जियँ जानी ।। बाल काण्ड दोहा 72 चौपाई 2-3

While you are the custodian of the Vedic laws/source of energy, laws of mass formation and the lord of the universe, Sita is your Maya /divine energy who creates, preserves and dissolves the universe on receiving the tacit approval of your gracious self.

श्रुति सेतु पालक राम तुम्ह जगदीस माया जानकी ।

जो सृजति जगु पालति हरति रूख पाइ कृपानिधान की ।। अयोध्या काण्ड छंद 125

This world is a spectacle and you are its spectator; nay, you make even Brahma (the creator), Vishnu (the preserver) and Sambhu (the destroyer) dance to your tune.

Similarly in the modern physics during alpha decay nucleus emits alpha particles, it may result in a new element with a lower atomic number. While during beta decay and electron capture the transformation of a neutron into a proton or a proton into a neutron occur. The neutron to proton transition is accompanied by the emission of electron and anti neutrino; while proton to neutron transition causes the emission of a positron and a neutrino. The electron or positron emission is called beta particles.

जगु पेखन तुम्ह देखनिहारे । बिधि हरि संभु नचावनिहारे ।। अयोध्या काण्ड दोहा 126 चौपाई 1

Bhawani(Eternal consort of Siva)is mother of the universe, unborn and imperishable energy, which has no beginning; is Shambhu's (source of oxidation)inseparable half. She creates, maintains and then dissolves the universe and assumes the semblance of a material form at her own will.

अजा अनादि सक्ति अबिनासिनि । सदा संभु अरधंग निवासिनि ।। बाल काण्ड दोहा 97 चौपाई 2

जग संभव पालन लय कारिनि । निज इच्छा लीला बपु धारिनि ।। बाल काण्ड दोहा 97 चौपाई 2

Potential of Bramh-Kan

While describing the potential of God particle/Bramh-kan/Rama body possesses the charm of the myriad cupids. He is as inexorable in crushing the enemy as countless millions of Durgas. He enjoys the luxury of a myriad Indra and is immeasurable in expanse as myriad firmaments.

जग महुँ सखा निसाचर जेते । लछिमनु हनइ निमिष महुँ तेते ।। सुन्दर काण्ड दोहा 43 चौपाई 4

रामु काम सत कोटि सुभग तन । दुर्गा कोटि अमित अरि मर्दन ।।

सक्र कोटि सत सरिस बिलासा । नभ सत कोटि अमित अवकासा ।। उत्तरकाण्ड दोहा 90 ख चौपाई 4

He has the might of the myriad winds and the brilliance of a myriad Sun. He is as cool as myriad moons and allays all the fears of mundane existence. Again he is irresistible unapproachable and interminable as a myriad deaths. Nay the lord is irrepressible as a myriad fire.

ससि सत कोटि सुसीतल समन सकल भव त्रास ।। उत्तरकाण्ड दोहा 91 क

काल कोटि सत सरिस अति दुस्तर दुर्ग दुरंत ।

धूमकेतु सत कोटि सम दुराधरष भगवंत ।। उत्तरकाण्ड दोहा 91 ख

The energy source is unfathomable as a myriad Patalas and dreadful as a myriad Yamas. He is immovable as Himalayas and as deep as a myriad sea. He is as sharp as countless millions of Saradas and possesses the creative skill of a myriad Brahmas. Again, he is as good a preserver as a myriad Vishnus and as thorough a destroyer as a myriad Rudras. In other words god

particle carries immeasurable strength comparable to all above cited example.

प्रभु अगाध सत कोटि पताला । समन कोटि सत सरिस कराला ॥

हिमगिरि कोटि अचल रघुबीरा । सिंधु कोटि सत सम गंभीरा ॥

सारद कोटि अमित चतुराई । बिधि सत कोटि सृष्टि निपुनाई ॥

बिष्णु कोटि सम पालन कर्ता । रुद्र कोटि सत सम संहर्ता ॥ उत्तरकाण्ड दोहा 91 ख चौपाई 1,4

The ways of providence are most perverse and strange. He creates, maintains and then destroys. In other words vicious cycle continues. Synthesis and destruction runs simultaneously. This process allows metabolism in the living body where synthesis of glucose and its destruction after a while continues in a vicious circle. As said

सुनि ससोच कह देबि सुमित्रा । बिधि गति बड़ि बिपरीत बिचित्रा ॥

जो सृजि पालइ हरइ बहोरी । बाल केलि सम बिधि मति भोरी ॥ अयोध्या काण्ड दोहा 281 चौ. 1

Fire is his mouth and Varuna (the God presiding over the waters), his tongue; while the creation preservation and destruction of the universe are his gestures. Means at the outer most periphery fire/electrons exist in the atom which is negatively charged. The core of atom contains water opposite to fire means it contains positive charge proton. The actions of these particles do play a role in creation, conservation and dissolution of worldly matters. In other words in the orientation of God particle negatively charged particles encircle the positively charged core which provides stabilization of sub-atomic body.

आनन अनल अंबुपति जीहा । उतपति पालन प्रलय समीहा ॥

रोम राजि अष्टादस भारा । अस्थि सैल सरिता नस जारा ॥ लंका काण्ड दोहा 14 चौपाई 3-4

The ties of all affections bonds, a pious soul gathers up and twists in to a string where with he binds his soul to my feet. Manas shows the mechanism of coupling that when other particle is freed from all its previous bonds and falls in the vicinity of God particle both the God particle and the other one couple with each other. However, till the particle circles in its own electromagnetic field the Higgs-boson particle do not combine. Thus Higgs-Englert-Brout mechanism appears to be similar to that proposed in Manas.

सब कै ममता ताग बटोरी । मम पद मनहि बॉध बरि डोरी ॥ सुन्दर काण्ड दोहा 47 चौपाई 2,3

The most incomparable fruit of my seeing is that the soul attains its natural state. Because one understands physics, chemistry of non-living and physical, chemical and biochemical processes of living beings. On analysis it comes out that all are consisted of similar physical and chemical moieties and all have a similarity at a molecular, atomic and sub-atomic level. When it is realized that all do contain smallest, common particles then it can be understood in a way that all are one and originated from the common ancestor.

मम दरसन फल परम अनूपा । जीव पाव निज सहज सरूपा ॥ अरण्य काण्ड दोहा 35 चौपाई 5

The other (knowledge), which brings forth the creation and which holds sway over the three gunas (sattva, rajas and tamas) is directed by the lord and has no strength of its own. These particles have capability to develop into other worldly matters however, till God particles yield life from the non-living matter. It is God particle which is initiator and basic inducing particles.

एक रचइ जग गुन बस जाके । प्रभु प्रेरित नहिं निज बल ताके ॥ अरण्य काण्ड दोहा 14 चौपाई 3

The attribute less aspect of the Godhead is easy to understand; but no one can comprehend the embodied form. Even sage's soul is bewildered on hearing the various exploits of the Lord, both of an intelligible and baffling character. In other words to understand inanimate is easier than to understand about animate. This also shows that by knowing physics and chemistry origin of life and its biology cannot be understood without knowing the actual inductive mechanism or transformation from non-living to living ones.

निर्गुन रूप सुलभ अति सगुन जान नहिं कोइ ।

सुगम अगम नाना चरित सुनि मुनि मन भ्रम होइ ॥ उत्तरकाण्ड दोहा 73 (ख)

Comparison between Higgs-boson particle and Bramh-Kan (God particle)

	Higgs - boson particle	Bramh-kan
1	Standard Physical Model suggests that atom consists of four groups of particles, 6 each of bosons, leptons and quarks and 49 particles of less significance.	Maruts are 49 in number
2	Two particles obtained on Large Hadrons Collider experiment; one with 123.5 GEV and the other 126.6 GEV (Gega Electro Volt).	Two particles are discussed one of them is Energy source (Mayapati) controller and second one is energy (MAYA). Both are present in the same moiety, and energy is created (adishakti) due to reaction in/with the energy source.
3	Higgs-boson particle originated from proton collusion, it couples with other particles under Higgs field and forms mass.	Bramh-Kan couples with other particles under in its impact field only. Demand based coupling in the field and consequent fusion is reported.
4	Atom generally deals with four physical forces i.e. Electromagnetic, gravitational, strong nuclear and weak nuclear.	Fundamental particle acts as inducer and catalyst as well. Particle forms the basis of reaction for mass formation and other chemical reaction.
5	Allows understanding of the fundamental physical structure only.	Allows understanding of fundamental particle, for imperishability& omniscience.
6	Charged and uncharged particles are Orientation based on the size of the atom. Location of two particles in the vicinity of mother particle (Proton) is not shown.	On left side of the Bramh-kan, negatively charged particles are shown and uncharged particle are reported at the centre with positively charged particle covering 50% area of the Bramh-kan.
7	Functions of God particles not discussed.	Functions of particles are discussed like creation, conservation and dissolution.
8	Potential of these particles not discussed.	Potential of Bramh-kan has been described in detail.
9	Induction quality and catalytic role not described.	Role of fundamental particle as inducer and catalyst is well discussed.
10	Two particles originate from different sources.	Both particles and attribute carrying particles originate from the same particle.
11	This shows a wide variation from the modern CERN experiment.	The energy is yielded in complimentary to the shape of the energy source.
12	The experiments are done in 20th century.	The script was written in 1630 BC.
13	51 short lived nuclids originated from primordial energy source.	51 shakti peeth originated from primordial energy source.
14	Big Bang spontaneous symmetry breaking happened in 10^{-11} seconds.	In Manas Model in obedience to whose fiat reaction/maya brings forth multitudes of universe in the quarter of a second.

WAY FORWARD/POSTULATES

1. Maruts which are 49 in number are comparable to 49 particles of less significance in standard Physical model, do not function on their own rather need stimulation for releasing energy. Identified stimulants could be tested in the light of Standard Physical Model/beyond this model. 3/14-32/125 chhand, 4/29-2,2/126-1
2. The two stimulants induce 49 Maruts .The induction needs to be studied in particle physics. 1/147-2, 1/143-3;1/54
3. Energy transforms as per the source of energy/its path and also fits in the garb of energy source. This theory requires exploration by Standard Physical Model.
4. Role of energy converting non-living to living needs studies. In Manas it is attributed to the stimulation of Bramh-kan. 1/115-3; 7/119 kh; 7/73 kh
5. Conversion of non -metal to metal by reducing energy level/Molecular weight needs to be explored under Standard Physical Model.
6. Presence of energy is oriented towards left of the particle covering half of the area in an atom. 1/147-1; 1/97-3
7. Potentials described for the god particle and energy transformation from one form to another should be explored in modern science. 7/90/91

The above description clearly reveals Manas treasure of advanced knowledge on nuclear physics over and above of modern science in the field of nuclear physics. In other words Manas contains beyond Standard Physical Model.

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3/14-3, 2/125 chhand, 4/29-2,2/126-1; 1/54; 1/147-2, 1/143-3; 1/115-3; 7/119 kh; 7/73 kh; 1/147-1; 1/97-3; 7/90/91; 7/14/3-4,

1.Balkand, 2.Ayodhyakand, 3.Aranyakand, 4.Kishkindhakand, 5.Sunderkand, 6.Lankakand and 7.Uttarkand

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