Quarks of 18 Types in Vedic Physics



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Abstract

Western nuclear physics contains six types of Quarks, while Vedic Nuclear Physics accounts for 18 types of Quarks and 18 types of anti – Quarks. In addition, Vedic Nuclear Physics posits three types of matter, which carries implications for Quark charges. Vedic Nuclear Physics posits Giant Quarks, something unknown in Western Physics. This paper describes the concept of Hyper – Circles, which are essential to Vedic Nuclear Physics and which may resemble Octonions, Sedenions or Exceptional Lie Algebras such as E7 and E8.

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Introduction

As a youth, I would spend my late afternoons drinking coffee, reading the Boston Globe and conversing with my eldest brother, Michael, who had been diagnosed as a schizophrenic. In reality, Michael had been abused by a priest of the Roman Catholic Church, an episode which destroyed his promise as an Eagle Scout and class valedictorian, as well as class president. During the 1960's, few suspected the evil harboring behind priests' skirts, least of all the altar boys who obeyed them.

The Catholic Church could not destroy Michael's genius, and he had transcended the Church in search of spiritual truth, which he ultimately found in India, the mother of all spiritual truth on Earth.

Michael and I often conversed away from others. Despite his chaotic sleep and waking patterns, he always managed to surface from somewhere within our suburban mansion when I came home and we would discuss things for hours, or until others arrived home to disturb our discussions. I was an AP student in Quincy, Massachusetts, and Michael retained his brilliance, despite the efforts of the mental health system to destroy his sanity.

At times, Michael would describe the yogis of India and claim that they were capable of seeing the interior of atoms, without benefit of microscopes or other equipment – never mind hadron colliders. In the same way, the yogis of India could see to the edges of the Universe, again, without benefit of telescope or viewing equipment.

At times like these I did question my brother's sanity. Our father had been Jesuit – trained as an honors student at Boston College, and he had provided much of my own education. As an AP student I was taking science classes with Ray Whitehouse, Bill McQueeny, and other esteemed teachers who taught me all about the rigors of western science. Imbued with western learning, no room existed in my mind for eastern learning.

Yet the *Dao of Physics* had been published in 1973, the Beatles and the Stones had met with the Maharishi and my afternoon reading material began to include a subscription to Rolling Stone magazine when it still resembled a weekly newspaper under the editorial direction of Jann Wenner. Locally, I read the Boston Phoenix, and so my reading habits included enough of the non – official media to lead me to suspect that Michael's claims about Indian yogis might in some way hold truth.

Not until 2010 or so did I begin to find evidence to support Michael's claims, some thirty years after his death. At that time I began to study Vedic astrology as taught by Narasimha Rao, an immigrant to the Boston area who gave weekly classes and who had written his own astrological software, which he gave away for free. The more I studied Vedic Astrology and the Vedas, the more I became convinced that Michael had been correct in his assertions.

Eventually I was able to purchase a small library of books on Vedic Physics directly from India and have it shipped safely to me in China, despite the inadequacies and corruption of the Indian and Chinese postal services. This small library includes the best available books about physics in India, and I have been studying them since.

My study of Vedic Physics began after I had completely mastered the advanced metaphysical Chinese systems, including the I Ching, Qi Men Dun Jia and Da Liu Ren, as well as a firm foundation in Chinese medicine, including herbal, acupuncture and massage. The Chinese could never offer any theoretical reason for why these systems worked, and this failure led me to India to find the source science which would support these wonderful predictive models.

So it is to Michael and to the authors of these Indian books that credit must be given to any help or advances found in this series of paper on Vixra. In some way, Michael's assertions have guided my actions over the years and so it is he to whom I give deep, heartfelt thanks.

This paper first gives the Wikipedia entry for Quarks, then moves on to give the Vedic explanation for 18 types of Quarks, which the author has previously mentioned in a paper published on Vixra. Taken together with the author's most recent Vixra paper about a typology of bosons, these two heuristic constructs may help guide western nuclear physicists in the proper direction towards building a correct model of the atom.

Wikipedia on Quarks



The <u>strengths</u> of the weak interactions between the six quarks. The "intensities" of the lines are determined by the elements of the <u>CKM matrix</u>.

A **quark** (<u>/'kwork/</u> or <u>/'kwork/</u>) is an <u>elementary particle</u> and a fundamental constituent of <u>matter</u>. Quarks combine to form <u>composite particles</u> called <u>hadrons</u>, the most stable of which are <u>protons</u> and <u>neutrons</u>, the components of <u>atomic nuclei</u>.^[1] Due to a phenomenon known as <u>color confinement</u>, quarks are never directly observed or found in isolation; they can be found only within <u>hadrons</u>, such as <u>baryons</u> (of which protons and neutrons are examples), and <u>mesons</u>.^{[2][3]} For this reason, much of what is known about quarks has been drawn from observations of the hadrons themselves.

There are six types of quarks, known as <u>*flavors*</u>: <u>up</u>, <u>down</u>, <u>strange</u>, <u>charm</u>, <u>bottom</u>, and <u>top</u>.^[4] Up and down quarks have the lowest <u>masses</u> of all quarks. The heavier quarks rapidly change into up and down quarks through a process of <u>particle decay</u>: the transformation from a higher mass state to a lower mass state. Because of this, up and down quarks are generally stable and the most common in the <u>universe</u>, whereas strange, charm, top, and

bottom quarks can only be produced in <u>high energy</u> collisions (such as those involving <u>cosmic rays</u> and in <u>particle accelerators</u>).



Quarks have various intrinsic properties, including <u>electric charge</u>, <u>mass</u>, <u>color</u> <u>charge</u> and <u>spin</u>. Quarks are the only elementary particles in the <u>Standard</u> <u>Model</u> of <u>particle physics</u> to experience all four <u>fundamental interactions</u>, also known as *fundamental forces* (<u>electromagnetism</u>, <u>gravitation</u>, <u>strong</u> <u>interaction</u>, and <u>weak interaction</u>), as well as the only known particles whose electric charges are not <u>integer</u> multiples of the <u>elementary charge</u>. For every quark flavor there is a corresponding type of <u>antiparticle</u>, known as an *antiquark*, that differs from the quark only in that some of its properties have <u>equal magnitude but opposite sign</u>.

The <u>quark model</u> was independently proposed by physicists <u>Murray Gell-Mann</u> and <u>George Zweig</u> in 1964.^[5] Quarks were introduced as parts of an ordering scheme for hadrons, and there was little evidence for their physical existence until <u>deep inelastic scattering</u> experiments at the <u>Stanford Linear</u> <u>Accelerator Center</u> in 1968.^{[6][7]} Accelerator experiments have provided evidence for all six flavors. The <u>top quark</u> was the last to be discovered at <u>Fermilab</u> in 1995.^[5]



Current quark masses for all six flavors in comparison, as <u>balls</u> of proportional volumes. <u>Proton</u> and <u>electron</u> (red) are shown in bottom left corner for scale

Vedic Physics on Quarks

In 2013 the author published an earlier paper on the Vixra server which states that there exist eighteen types of Quarks, rather than the six posited by the Standard Model. The purpose of this section is to describe in more detail the eighteen types of Quarks in Vedic Physics, which will ultimately serve as an important component of the Vedic Atom to be described in a series of forthcoming papers on Vedic Nuclear Physics.

Quarks are formed from sets of six sub – atomic particles named Vrndarakas, the formation of which will be discussed in a later paper. The Vrndarakas come in three types, based on charge. Charge is determined mostly by angle of inclination of the Vrndarakas, either ninety degrees, actute or obtuse from the central point.

	Name	Charge	
1	Sato Guni	Neutral	8 x 8 Satva – the I Ching and DNA amino
	Vartma		acids
2	Rago Juni	Positive	Tai Xuan Jing, Dao De Jing and Celestial
	Vartmas		Pivot
3	Tamo Guni	Negative	Invisible decaying particles

The Vartmas gain, lose or maintain charge as they interact with Asvinou Particles and cross different shell layers called Lokas. Recall that the names of the Vartmas reflect those of Bosons or Trivartmas, relating to the type of matter which they form: dynamic Raja, stable Satva or Thaamic of the Substratum.

These Vartmas develop in the 2 - dimensional atomic space or ring labeled the "Bhuvaha – Loka." The cycles of Hyper – Circle 6 form their two – dimensional structures at this level before maturing. Once the maturation process has concluded, the Vartmas form into Hyper – Circle 7.

All three types of Vartma have spin as 1,2,3 in the free state, but in the structure of Hyper – Circle 7, as a joint set, then:

These have plus/minus 1/2 spin with plus / minus 2/3 charge.

The six Vartma units permute at the six places at the cycle periphery of RTA of Hyper – Circle 7 of Vartmas. Three Vartma units produce a charge of plus / minus 1/2 spin. If one negative charged Vartma linked with two neutral charged Vartmas, and if together they form a plus / minus 1/2 spin, then that Hyper – Circle 7 will show a charge of negative 1/3.

When two positively charged Avartmas are placed with one neutral Vartma on these three places, then it will reach a positive 2/3 charge. Therefore, along with the other types of permutations of these three types of Vartmas on these three places, the charge of plus / minus 1/3 or plus / minus 2/3, or a neutral charge, can be shown by the particle made by the structure of Hyper – Circle 7, of these Vartmas.

These three types of Vartmas can be placed on different sets of three places by:

$$3! = 3 \times 2 \times 1 = 6$$
 ways

Thus, the particle formed by the Hyper – Circle 7, and these Vartmas will show six variations of the properties of the different types of six particles, each having different types of forces of their charges. These different types of forces of charges are of three types: positive, negative and neutral.

In western science, these types of forces and charges are denoted as colour forces of the six types of Quarks, red, green and blue.

One structure of the form of Hyper – Circle 7, of all the three types of these Vartmas becomes a particular structure of a particular Quark particle in western science. The Hyper – Circle 7 of the seven hyper – circles of the Tri Vartmas form the structure of the larger Quark particles, which still remain unknown to western science to this day. The giant Quarks emerge from this very process when the seven hyper circles of these bigger Quarks develop. By the bonding process of the seven Hyper – Circles, of these Tri Vartmas, quarks with different mass develop.

When Hyper – Circle 7 of the Tri Vartmas of a Quark particle converts into the eighth Hyper – Circle, disintegration begins and it becomes an anti – Quark particle. Vedic Physics regards the "flavours" of Quarks as Quarks, and so states that 18 types of Quarks exist, plus 18 types of anti – quarks. The free particle of Vartma becomes the Gluon, which makes the bonding of the quark particles develop into the giant quarks or other larger particles.



The fourteen Loksa or spaces of Vedic Nuclear Physics.

Conclusion

The primary difference between Vedic Nuclear Physics and western nuclear physics lies in the distinction between three types of matter, Raja, Satwa and Thaama. In a previous paper on Vixra, the author provided the Vedic Nuclear Physics typology for Bosons under this scheme.

This paper provides the scheme for another particle which apparently has no counterpart in western physics, the Vrndarakas. The Vrndarakas follow the same scheme as above in terms of charge: in the distinction between three types of matter, Raja, Satwa and Thaama.

A further distinction is the elimination of the ridiculous "flavor" category of Quarks in favor of eighteen types of Quarks. This may seem a minor point here but when the entire field of Vedic Nuclear Physics gets articulated, the difference will probably appear more than a minor one.

Vedic Physics contains the notion of "Hyper – Circle," and the author gives no equivalent in western physics. The author of this paper suggests that the concept of "Hyper – Circle" may consist of the equivalent of Lie Algebra Representations or else groups of Octonions or Sedenions.

Finally, Vedic Physics posits the existence of Giant Quarks, as well as large massive particles, all unknown to Western nuclear physics.

This paper has focused on the differences between Quarks in Vedic and western physics. Eventually the author hopes to present an overview of the entire Vedic Nuclear Physics, which will provide additional differences between western and eastern conceptions of nuclear physics.

Bibliography

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Contact

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There are those who look at things the way they are, and ask why...

I dream of things that never were, and ask why not?

Let's dedicate ourselves to what the Greeks wrote so many years ago: to tame the savageness of man and make gentle the life of this world.

Robert Francis Kennedy