Abstract

Since the 19th Century, many famous western thinkers and important people, including philosophers, regarded the Bhava Gita as an important philosophical work, worthy of guiding the life of an individual. None realized that they were in fact reading a Vedic Nuclear Manual. In fact, the major works of Vedic Literature were written to serve at least two purposes: to describe particle physics and at the same time to prescribe via metaphor the optimum way to live life on Earth for soul purposes.
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Introduction

The more one views the state of writing on Vedic Physics the more dismal a picture emerges. To date, it appears that the basic ideas of Vedic Physics have not been well understood and little progress has been made to advance the foremost concepts to the world at large.

This paper endeavors to slightly change that situation, by presenting some of the more popular works on Vedic Physics and providing more light and explanation about them. Perhaps by having Vedic Physics articulated more broadly and clearly may help the field to win acceptance.

For that purpose, the paper examines the 13th Century Sayana and his ability to decode the Rig Veda to reveal its hidden calculation of the speed of light.

Then, the paper examines various passages of the Bhagava Gita to illustrate that the famous treatise of Vedic Literature in fact constitutes descriptions of the cosmic field.

In bringing these concepts to light, the author hopes that more people will come to accept the hidden wisdom in the longest wisdom tradition known to humanity.
The *Bhagavad Gita* (Sanskrit: श्रीमद्भगवद्गीता, Śrīmadbhagavadgītā, Sanskrit pronunciation: [ˈbʱəɡəʊd ɡɪˈtəː] (listen)), literally meaning *The Song of the Bhagavan*, often referred to as simply the *Gita*, is a 700-verse scripture that is part of the Hindu epic *Mahabharata*. It is a sacred text of the Hindus.

The *Gita* is set in a narrative framework of a dialogue between *Pandava* prince *Arjuna* and his guide Lord *Krishna*. Facing the duty to kill his relatives, Arjuna is " exhorted by his charioteer, *Krīṣṇa*, among others, to stop hesitating and fulfill his *Kṣatriya* (warrior) duty as a warrior and kill."[1] Inserted[1] in this appeal to *ksatriyadharma* (heroism)[2] is "a dialogue [...] between diverging attitudes concerning and methods toward the attainment of liberation (*moksha*)."[1]


Numerous commentaries have been written on the *Bhagavad Gita* with widely differing views on the essentials. Vedanta commentators read varying relations between Self and Brahman in the text: Advaita *Vedanta* sees the non-dualism of *Atman* and Brahman as its essence,[8] whereas *Bhedabheda* and *Vishishtadvaita* see Atman and Brahman as both different and non-different, and *Dvaita* sees them as different. The setting of the *Gita* in a battlefield has been interpreted as an allegory for the ethical and moral struggles of the human life.

The *Bhagavad Gita*’s call for selfless action inspired many leaders of the *Indian independence movement* including *Mohandas Karamchand Gandhi*, who referred to the *Gita* as his “spiritual dictionary”. [9]

*Bhagavad Gita* comprises 18 chapters (section 25 to 42)[27] in the *Bhishma Parva* of the epic *Mahabharata* and consists of 700 verses. [28] Because of differences in *recensions*, the verses of the *Gita* may be
numbered in the full text of the *Mahabharata* as chapters 6.25–42 or as chapters 6.23–40. According to the recension of the *Gita* commented on by Adi Shankara, a prominent philosopher of the *Vedanta* school, the number of verses is 700, but there is evidence to show that old manuscripts had 745 verses. The verses themselves, composed with similes and metaphors, are poetic in nature. The verses mostly employ the range and style of the Sanskrit *Anustubh* meter (*chhandas*), and in a few expressive verses the *Tristubh* meter is used.

The Sanskrit editions of the *Gita* name each chapter as a particular form of yoga. However, these chapter titles do not appear in the Sanskrit text of the *Mahabharata*. Swami Chidbhavananda explains that each of the eighteen chapters is designated as a separate yoga because each chapter, like yoga, “trains the body and the mind”. He labels the first chapter “Arjuna Vishada Yogam” or the “Yoga of Arjuna’s Dejection”. Sir Edwin Arnold translates this chapter as “The Distress of Arjuna”.

Krishna displays his *Vishvarupa* (Universal Form) to Arjuna on the battlefield of Kurukshetra (chapter 11).

**Gita Dhyanam**: (contains 9 verses) The *Gita Dhyanam* is not a part of the main Bhagavad Gita, but it is commonly published with the Gītā as a prefix. The verses of the *Gita Dhyanam* (also called Gītā Dhyāna or Dhyāna Ślokas) offer salutations to a variety of sacred scriptures, figures, and entities, characterise the relationship of the Gītā to the *Upanishads*, and affirm the power of divine assistance. It is a common practice to recite these before reading the *Gītā*. 

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*Sanskrit text*
1. **Arjuna–Visada yoga** (*The Distress of Arjuna* contains 46 verses): Arjuna has requested Krishna to move his chariot between the two armies. His growing dejection is described as he fears losing friends and relatives as a consequence of war. [web 5]

2. **Sankhya yoga** (*The Book of Doctrines* contains 72 verses): After asking Krishna for help, Arjuna is instructed into various subjects such as, **Karma yoga**, **Gyaana yoga**, **Sankhya yoga**, **Buddhi yoga** and the immortal nature of the soul. This chapter is often considered the summary of the entire *Bhagavad Gita*. [web 6]

3. **Karma yoga** (*Virtue in Work* contains 43 verses): Krishna explains how Karma yoga, i.e. performance of prescribed duties, but without attachment to results, is the appropriate course of action for Arjuna. [web 7]

4. **Gyaana–Karma–Sanyasa yoga** (*The Religion of Knowledge* contains 42 verses): Krishna reveals that he has lived through many births, always teaching yoga for the protection of the pious and the destruction of the impious and stresses the importance of accepting a guru. [web 8]

5. **Karma–Sanyasa yoga** (*Religion by Renouncing Fruits of Works* contains 29 verses): Arjuna asks Krishna if it is better to forgo action or to act (“renunciation or discipline of action”). Krishna answers that both are ways to the same goal, but that acting in Karma yoga is superior. [web 9]

6. **Dhyan yoga** or **Atmasanyam yoga** (*Religion by Self-Restraint* contains 47 verses): Krishna describes the **Ashtanga yoga**. He further elucidates the difficulties of the mind and the techniques by which mastery of the mind might be gained. [web 10]

7. **Gyaana–ViGyaana yoga** (*Religion by Discernment* contains 30 verses): Krishna describes the absolute reality and its illusory energy **Maya**. [web 11]

8. **Aksara–Brahma yoga** (*Religion by Devotion to the One Supreme God* contains 28 verses): This chapter contains eschatology of the *Bhagavad Gita*. Importance of the last thought before death, differences between material and spiritual worlds, and light and dark paths that a soul takes after death are described. [web 12]

theologian Christopher Southgate, verses of this chapter of the Gita are panentheistic, while German physicist and philosopher Max Bernhard Weinstein deems the work pandeistic.

10. **Vibhuti–Vistara–yoga** (*Religion by the Heavenly Perfections* contains 42 verses): Krishna is described as the ultimate cause of all material and spiritual existence. Arjuna accepts Krishna as the Supreme Being, quoting great sages who have also done so.

Krishna displays his Vishvarupa (Universal Form) to Arjuna on the battlefield of Kurukshetra, described in Visvarupa–Darsana yoga, chapter 11.

11. **Visvarupa–Darsana yoga** (*The Manifesting of the One and Manifold* contains 55 verses): On Arjuna’s request, Krishna displays his “universal form” (Viśvarūpa), a theophany of a being facing every way and emitting the radiance of a thousand suns, containing all other beings and material in existence.

12. **Bhakti yoga** (*The Religion of Faith* contains 20 verses): In this chapter Krishna glorifies the path of devotion to God. Krishna describes the process of devotional service (*Bhakti yoga*). He also explains different forms of spiritual disciplines.

13. **Ksetra–Ksetrajna Vibhaga yoga** (*Religion by Separation of Matter and Spirit* contains 35 verses): The difference between transient perishable physical body and the immutable eternal soul is described. The difference between individual consciousness and universal consciousness is also made clear.

14. **Gunatraya–Vibhaga yoga** (*Religion by Separation from the Qualities* contains 27 verses): Krishna explains the three modes (gunas) of material nature pertaining to goodness, passion, and nescience. Their causes, characteristics, and influence on a living entity are also described.

15. **Purusottama yoga** (*Religion by Attaining the Supreme* contains 20 verses): Krishna identifies the transcendental characteristics of God such as, omnipotence, omniscience, and omnipresence. Krishna also describes a symbolic tree (representing material existence), which has its roots in the heavens and its foliage on earth. Krishna explains that this tree should be felled with the ”axe of detachment”, after which one can go beyond to his supreme abode.
16. **Daivasura–Sampad–Vibhaga yoga** (*The Separateness of the Divine and Undivine*[^32] contains 24 verses): Krishna identifies the human traits of the divine and the demonic natures. He counsels that to attain the supreme destination one must give up lust, anger, greed, and discern between right and wrong action by discernment through Buddhi and evidence from the scriptures. [web 20]

17. **Sraddhatraya-Vibhaga yoga** (*Religion by the Threefold Kinds of Faith*[^32] contains 28 verses): Krishna qualifies the three divisions of faith, thoughts, deeds, and even eating habits corresponding to the three modes (gunas). [web 21]

18. **Moksha–Sanyasa yoga** (*Religion by Deliverance and Renunciation*[^32] contains 78 verses): In this chapter, the conclusions of previous seventeen chapters are summed up. Krishna asks Arjuna to abandon all forms of dharma and simply surrender unto him and describes this as the ultimate perfection of life. [web 22]
Sāyaṇa (सायण, with honorific Sāyaṇācārya; died 1387) was an important commentator on the Vedas. He flourished under King Bukka I and his successor Harihara II, in the Vijayanagar Empire of South India. He was the son of Māyana, and the pupil of Vishnu Sarvajña and of Samkarāṇanda. More than a hundred works are attributed to him, among which are commentaries on nearly all parts of the Veda; some were carried out by his pupils, and some were written in conjunction with his brother Mādhava or Vidyāraṇya-svāmin.

Sayana's major work is his Vedartha Prakasha (literally, "the meaning of the Vedas made manifest"), or commentary on the Vedas. His commentary on the Rigveda was edited by Max Müller, 1823-1900. The core portion of the commentary was likely written by Sayana himself, but it also includes contributions of his brother Mādhava, and additions by his students and later authors who wrote under Sayana's name. "Sayana" (or also Sāyaṇamādhava) by convention refers to the collective authorship of the commentary as a whole without separating such layers.

He has also written many lesser manuals called Sudhanidhis treating Prayashchitta (expiation), Yajnatantra (ritual), Purushartha (aims of human endeavour), Subhashita (Collection of moral sayings), Ayurveda (Indian traditional medicine), Sangit Sara (The essence of music), Prayashchitra, Alankara, and Dhatuvrddhi (grammar).
One writer on the subject of Vedic Physics describes the relationship between important works of Vedic Literature:

An effective pre-glacial system that had continued for ages survived the cataclysmic event by the sheer momentum of past practices spread widely. The relatively few survivors were able to regurgitate their memorised knowledge without a break. It ensured the complete revival and renaissance of Vedic knowledge.

That, ostensibly, was one reason why this group lacked motivation to re-invent religious, philosophical or scientific systems. Vedic scientific knowledge was epitomised in one pre-glacial creation the Bhagavadgita. It had for its axiomatic core, the creation by an intellectual colossus Maharishi Kapila, the Sankhyayoga.

The unforgettable background, the Mahabharatha, had the Bhagavadgita, with the imbedded Sankhyayoga as its scientific and philosophic foundation. To appreciate the sheer ingenuity involved in creating this information transfer, one must realise it targeted three groups simultaneously.

While Sankhyayoga (Sankhya) or the theory of counting as Jnanayoga focused on the rational intellectual, the Bhagavadgita provided the philosophic meaning through a pedagogic dialogue between the personalities of Sri Krishna and Arjuna as Bhaktiyoga.

Finally, aimed at the lay public through the most vibrant and unforgettable setting of a battlefield background with the possibility of dramatising every event in the manifestation process as Karma yoga.

An axiomatic science practised its laws holistically and ritually, which eventually gained a religious equation. Originally, this was an elite concept of practising axiomatic laws called Dharma. The theory based entirely on axioms had eternal validity, for one cannot disprove an axiom.

Above all, it was a system practised by the pre-glacial forefathers and an accident of nature left it as a relic to post-glacial man.

What did Maharishi Kapila propound in the Sankhyayoga (Sankhya) that entitled it to be the core of the Bhagavad gita? It is highly indicative that in
chapter 10, verse 26, Sri Krishna identifies himself with Muni Kapila as the master of Siddhi.

Sankhya is not only mentioned by name in the second chapter verse 39, but its heading is Sankhya yoga, as an introduction to the most profound philosophy on which the subsequent dialogues proceed.

The same author suggests the human soul as a metaphor described in scientific literature:

The concept of the human soul and its consequence was the interaction of a resonant hologram that acted according to the principles of the three Gunas. Epitomised as the (field theory) Kshetrajna of (actions) Karma in the Bhagavad gita, it followed the same axiomatic laws of a Vritti or photon but in its own time cycle.

One cannot have spirituous vibrations without interactive matter, which was the core-Guna-theme in the Bhagavad gita. The 50 verses in chapter 13 in the Bhagavadgita gave an exhaustive pedagogic explanation of the field concept or Kshetra comprising the Brahmanda or field of cosmic space. Maharishi Kapila showed unequivocally that what an observer detected was only a vibration from an interaction between two objects.

The 35 verses in chapter 13 in the Bhagavad gita gave an exhaustive pedagogic explanation of the field concept or Kshetra comprising the Brahmanda or field of cosmic space:

In chapter thirteen Lord Krishna reveals the distinct difference between the physical body and the immortal soul. He explains that the physical is transitory and perishable whereas the soul is immutable and eternal. The Lord also gives precise knowledge about the individual soul and the ultimate soul. Thus this chapter is entitled: The Individual and Ultimate Consciousness.

Arjuna said: O Kṛṣṇa, I wish to understand this material energy, the individual consciousness, the field of activity, the knower of the field of activity, knowledge and the goal of knowledge. Lord Kṛṣṇa said: O Arjuna, the material body is known as the field of activity; those who know this describe those who know this as knowers of the field of activity.
श्रीभगवानुवाच ।
ईदं शरीरं कौन्तेय क्षेत्रमित्यभिधीयते ।
एतत्थो वेद्ति तं प्राहूः क्षेत्रज्ञ इति तद्विद्: ॥ १३-१ ॥
śrībhagavān uvāca ।
idam śarīram kaunteya kṣetram ity abhidhiyate ।
etad yo vetti tam prāhuḥ kṣetrajña iti tadvadah ॥ १३-१ ॥

क्षेत्रज्ञां चापि मां विद्धि सर्वक्षेत्रेषु भारत ।
क्षेत्रक्षेत्रज्ञयोज्ञोऽनं यत्तज्ञानं मतं मम ॥ १३-२ ॥
kṣetrajñaṃ cāpi māṃ viddhi sarvakṣetreṣu bhārata ।
kṣetrakṣetrajñayor jñānaṃ yat taj jñānam mataṃ mama ॥ १३-२ ॥

O Arjuna, certainly knowing Me as well within all bodies as the knower of the field of activity such knowledge of the field of activity and the knower of the field is actual knowledge in My opinion.

तत्क्षेत्रं यत्च याद्वक यदिकारिः यत्थ्य यतूः ।
स च यो यत्रभाववक्त तत्समासेन मे श्रुणु ॥ १३-३ ॥
tat kṣetram yac ca yādṛk ca yadvikāri yataś ca yat ।
sa ca yo yatprabhāvaś ca tat samāsena me śrṇu ॥ १३-३ ॥

O Arjuna, certainly knowing Me as well within all bodies as the knower of the field of activity such knowledge of the field of activity and the knower of the field is actual knowledge in My opinion.
Hear in brief from Me about that field of activities, also what kind of nature it possesses, what transformations it produces, from whence it was born and from what and what is its influence.

The major elements of earth, water, air, fire and ether; the false ego, spiritual intelligence, the unmanifest element in material nature, the ten senses along with the mind and the five objects of the senses as sound, sight, taste, touch and smell; desire, disdain, happiness, distress, the perceptual faculty of the mind, determination; all this is declared to be the field of activities modified by the six transformations of the physical body beginning with birth and ending with death.
अमानिल्लमदूम्भिल्लमहिसा क्षणिनिरारजेम् ।
आचार्योपासनं श्रौचं स्थैर्यमातमविनिग्रहः ॥ १३-७॥
amānītvam adambhitvam ahimsā kṣāntir ārjavam ।
ācāryopāsanam saucaṁ sthairyam ātmaviniṅghah ॥ १३-७॥

Humility, pridelessness, nonviolence, tolerance, honesty, rendering service to a bonafide spiritual master, cleanliness, steadfastness; self-control, renouncing the desires of the senses, free from false egoism and aware of the distressful inauspiciousness of birth, old age, disease and death. Being without attachment to son, wife and home, equipoised in all situations, consistent, devoid of elation or disappointment regarding favorable or unfavorable circumstances, preference for solitary places, aversion of mundane society and exclusively performing devotional service unto Me by the unalloyed science of uniting the individual consciousness with the Ultimate Consciousness. Always aspiring for self-realization, constantly meditating on the Ultimate Truth as the goal of true wisdom; all this is thus proclaimed as knowledge and whatever is contrary to this is nescience.

इन्द्रियार्थेशु वैराग्यमनहंकार एव च ।
जन्ममृत्युजराव्याधिहिता:खंदोषानुदर्शनम् ॥ १३-८॥
indriyārtheṣu vairāgyam anahāmkār eva ca ।
janmamṛtyuṣjarāvāyādhiḥkhaḍoṣānudarśanam ॥ १३-८॥

असक्तिरनविष्क्रां: पुत्रदारणहादिशु ।
नित्यं च समाचित्तविभविनिदीधोपपत्तिशु ॥ १३-९॥
asaktir anabhiṣvāṅgaḥ putradāraṅghādīṣu ।
nityāṃ ca samacittavāṃ iṣṭāniṣtopapattīṣu ॥ १३-९॥

मही चातन्ययोगन भक्तिर्व्यमिच्छारिणी ।
विविक्तदेशसेवितव्यवमर्तिर्जनसंसदि ॥ १३-१०॥
mayi cānanyayogena bhaktivavyabhicāriṇī ।
viviktadeśasevītvam aratī janasaṁsadi ॥ १३-१०॥
अध्यात्मज्ञाननित्यवं तत्वज्ञानार्थदर्शनम्।
एतज्ञानमिति प्रोक्तमज्ञानं यद्तो ज्ञयथा॥ १३-११॥
adhyātma-jñānani-tātvam tatvajñānārthadarsanam ||
etaj jñānam iti proktam ajñānām yad ato 'nyathā ||13-11||

ज्ञेयं यत्तप्रवक्ष्यामि यज्ञाबामृतमश्रुते।
अनादिमत्यं ब्रह्म न सत्तनासस्थुच्यते॥ १३-१२॥
jñeyaṃ yat tat pravakṣyāmi yaj jñātvāṃrām aśnute ||
anādīmat param brahma na sat tan nāsad ucyate ||13-12||

सर्वतःपाणिपादं तत्सर्वतोपक्षिशिरोमुखम्।
सर्वतःश्रुतिमल्लोकसर्वमावृत्यतिष्ठति॥ १३-१३॥
sarvataḥpanipadāṃ tat sarvatokṣiśiromukham ||
sarvataḥsṛutimal āloke sarvam āvṛtya tiṣṭhati ||13-13||

Now I shall explain that which is to be known, realizing which the nectar of immortality is attained; that reality is eternal having Me as the Supreme, beyond cause, beyond effect and designated as Brahma the Ultimate Truth.

सर्वनिद्रियगुणाभासं सर्वनिद्रियविवर्जितम्।
असतं सर्वभृत्ष्वेत निर्गुणं गुनामोक्तं च॥ १३-१४॥
sarvendriyagunābhasam sarvendriyavivarjitaṃ ||
asaktaṃ sarvabhūc caiva nirgunaṃ guṇabhoktaḥ ca ||13-14||

With hands and feet everywhere, with eyes, heads and faces everywhere, hearing all; that reality exists pervading everything in this world.
That Ultimate Truth is cognizant of all the senses of the material nature; yet is devoid of all material senses, completely unattached yet the sustainer of everything, transcendental to material nature, yet the maintainer of material nature.

Within and without all living entities, that Ultimate truth is stationary as well as mobile; on account of its being subatomic, that Ultimate Truth is incomprehensible and is far away yet also very near.

Without division that Ultimate Truth appears to be divided among all the various living entities and is to be known as the preserver of all living entities and the destroyer as well as the creator.

It is supreme and also supreme, the one and the same, transcendent, abode of all, all-sustaining, begetter, support of all, the one, unchanging, eternal, one, and everlasting.
That Ultimate Truth is declared as the illuminator of all that illuminates, beyond the darkness of ignorance; residing within the heart of everyone it is comprehensible by the wisdom gained from realization by the knowledge of direct experience.

नक्तिं पुरुषं चैव विद्यनादी उभावपि ।
विकारांश्युण्वाणेश्व विद्धि प्रकृतिसंभवान् ॥ १३-१९॥

prakṛtiṁ puruṣaṁ caiva viddhy anādi ubhāv api ā
vikārāṁś ca guṇāṁś caiva viddhi prakṛtisambhavān ॥13-19॥

My devotee understanding this field of activity, knowledge and what is to be known thus described in summary becomes qualified for My divine nature.

कार्यकारणकृत्ते हेतुः प्रकृतिरुच्यते ।
पुरुषः सुखदुःखानां भोक्तुः हेतुरुच्यते ॥ १३-२०॥

kāryakāraṇaṃ kārtṛtvē hetuḥ prakṛtir ucyate ā
puruṣaḥ sukhaduḥkhānām bhokṛtvē hetur ucyate ॥13-20॥

Know that verily both the material energy and the individual consciousness certainly are beginningless and know that transformations of the body and the three modes of material nature also certainly are produced by the material energy.

पुरुषः प्रकृतिस्थो हि भुज्जः प्रकृतिजान्तगुणान् ।
कारणं गुणसङ्गो दस्य सदसद्योधिनिन्दमसु ॥ १३-२१॥

puruṣaḥ prakṛtistho hi bhuujte prakṛtijān guṇān ā
kāraṇaṁ guṇasaṅgo 'syā sadasadyojanīnmasu ॥13-21॥

In the matter of creation the material energy is responsible for cause and effect; in the matter of experiencing happiness and distress the individual consciousness is declared responsible.

उपद्रश्नुमन्ता च भरतो भोक्ता महेश्वरः ।
परमात्मेति चायुक्तो देहे तस्मिनपुरुषः परः ॥ १३-२२॥

upadraṣṭānumantā ca bhartā bhoktā mahaśvarah ā
paramātmeti cāpy ukto dehe 'smin puruṣaḥ paraḥ ॥13-22॥

The individual consciousness situated in the material energy certainly experiences the three modes of material nature produced by the material energy; the beguiling infatuation of these three modes of material nature is the cause of a beings innumerable births, superior and inferior in the wombs of variegated lifeforms.
ya evam vetti puruṣam prakṛtim ca guṇaiḥ saha l
sarvathā vartamāno 'pi na sa bhūyo 'bhijāyate ||13-23||

Within the body, supreme to the individual consciousness; an indwelling observer; a sanctioner, a preserver, an enjoyer and indeed ultimate controller as well is described as the Ultimate Consciousness.

dhyānenātmani paśyanti ke cid ātmānam ātmanā l
anye sāmkhyena yogena karmayogena cāpare ||13-24||

Anyone who understands in this way the individual consciousness and the Ultimate Consciousness also the material energy along with the three modes of material nature, one although existing in any condition never takes birth again.

anye evamajānanti: śrūṇaṇyembhya upāsate l
te 'pi chaṭitarntyeva mṛtyum śrutipāraṇāḥ ||13-25||

some by the science of the individual consciousness attaining communion with the Ultimate Consciousness perceive within the self, the Ultimate Consciousness by meditation on the self; others by the discrimination between matter and spirit and others by the science of uniting the individual consciousness with the Ultimate Consciousness by actions.

yāvat samjāyate kim cit sattvam sthāvarajaṅgamam l
kṣetra-kṣetrajanāsaṁyogāt tad viddhi bharatarṣabha ||13-26||

Yet others without knowing these methods engage in worship by hearing from others; verily they becoming established from listening also transcend the transmigration of death.
समं सर्वेषु भूतेषु तिष्ठन्तं परमेश्वरम् ।
विन्ध्यतस्वाविनिश्चयन्तं यः परहयति स परहयति || १३-२७||
samaṃ sarvesu bhūteṣu tiṣṭhantam paramesvaram I
vināśayatv avināśyantam yah paśyati sa paśyati ||13-27||

O Arjuna, whatever living entity, animate or inanimate comes into being; know they are
produced by the interaction between the field of activities and the knower of the field of
activities.

समं पश्यन्ति सर्वं समवर्त्तमात्रमेव ।
न हिनस्त्रात्मनात्मानं ततो याति परं गतिम् ॥ १३-२८॥
samaṃ paśyan hi sarvatra samavasthitam īśvaram I
na hinaṣṭṛ ātmanātmanam tato yāti parām gatim ||13-28||

Anyone who perceives the Ultimate Consciousness residing equally in all living entities
everywhere as the imperishable within the perishable; such a one actually perceives.

प्रकृत्यांव च कर्मांगि क्रियमाणानि सर्वशः ।
यः परहयति तथात्मानमकर्तारं स परहयति || १३-२९||
prakṛtyaiva ca karmāṇi kriyamāṇāni sarvasaḥ I
yah paśyati tathātmanam akartāraṁ sa paśyati ||13-29||

By seeing the Ultimate Consciousness equally everywhere, impartially situated, one does not
degrade the embodied self, by the self; therefore reaching the supreme goal.

यदा भूतपृथ्वभावमेकस्थमनुपदहयति ।
तत् एव च विस्तारं ब्रह्म संपद्यते तदा ॥ १३-३०॥
yadā bhūtapṛthagbhāvam ekasṭham anupaśyati I
tata eva ca vistaram brahma sampadyate tadā ||13-30||

Anyone who perceives in this way that activities in all respects are being performed only by
the material energy; such a one perceives perfectly the embodied self as the non-doer.

अनादिबालिक्षिप्तात्यमेकस्थमायमव्ययः ।
शरीरस्यो धिप कौन्तेय न करोति न लिप्यते || १३-३१||
anādītvaṁ nirguṇatvāt paramātmāyam avyayaḥ I
śārīrastra 'pi kaunteya na karoti na lipyate ||13-31||

19
When one actually perceives the expansion and diversity of all life forms as situated in the unity of material nature; thereafter at that time the Ultimate Truth is attained.

This Ultimate Consciousness is beginningless, immutable, devoid of any material quality O Arjuna; although situated within the body it never does anything nor is it influenced.

As all pervading space is never implicated due to being subtle; similarly the Ultimate Consciousness being all pervading, situated in the body is never implicated.

O Arjuna just as one sun illuminates an entire universe; similarly the Ultimate Consciousness and the individual consciousness illuminates the entire field of activity of the physical body.

O Arjuna just as one sun illuminates an entire universe; similarly the Ultimate Consciousness and the individual consciousness illuminates the entire field of activity of the physical body.
Discussion

Chapter 13 describes the Thaamic Region of Dark Matter in the universe – matter that does not function in any way. Those individuals who prove capable of seeing God in every atom, and seeing the Universe as a giant hologram, become enlightened of the mundane existence on Earth and so can free themselves from birth. Those who study and those who follow those who See can also find liberation from birth.

In this way the Bhavad Gita functions as a scientific description of the Universe and as a prescriptive guide for human souls while embodied on Earth. In direct contrast to 2014 Earth life, where Science and Spirituality stand at the end of two extremes, glaring at each other, Vedic philosophy encourages the unification of science and spirituality, for each complements the other, and in reality it remains impossible to have one without the other.

When we strip away spirituality from science, such as the United States accomplished at Hiroshima and especially at Nagasaki, we stand in peril of destroying ourselves and our home, Earth. J. Robert Oppenheimer felt in complete awe at Los Alamos, New Mexico in July 1945, yet he vigorously protested the destruction of Nagasaki as completely unnecessary, a widely – shared view.
Sayana and the Rig Veda

While this story has been repeated across the internet, few have actually given the verses in Sanskrit font

**Speed of light**

It has been suggested that Sayana was aware of the finiteness of the speed of light and he approximated its value. These claims are based on the following passage from the commentary on *Rig Veda*(commenting on RV 1.50.4):

"tatha ca smaryate yojananam. sahasre dve dve sate dve ca yojane
ekena nimishardhena kramaman"

"तथा च समर्थते योजनानां सहस्रं द्वे द्वे शते द्वे च
योजने एके निमिषार्धेन क्रममाण नमोःस्तुते।।"

"[O Sun,] bow to you, you who traverse 2,202 yojanas in half a nimesha."

Subhash Kak points out that the *Vayu Purana* (ch. 50) has a comparable passage, where the "speed of the Sun" is exactly 1/18th of Sayana's value. While he is susceptible to assuming "scientific foreknowledge" by mystical means, he accepts that "to the rationalist" the proximity of Sayana's value to the physical constant is simply coincidence.

वायु पुराण,

The *Vayu Purana* (Hindi: वायु पुराण, Vāyu Purāṇa) is a *Shaiva Purana*, a Hindu religious text, dedicated to the god *Vayu* (the wind god), containing about 24,000 shlokas.
Kak [1] notes that Sayana, Prime-minister of India in the 14th century, could decipher an extract from *The Rigveda* from which followed that the value of the velocity of light was equal to 300,000 km/s. Note that in Europe, Danish astronomer O. Rømer could measure the same value of the velocity of light only in 1676, i.e. around 150 year later.

Roy [2] showed that in *The Rigveda* and other ancient Vedic books under names of gods, people and their activity with the participation of domestic animals there was coded the ancient knowledge about the structure of space, cosmology and elementary particles.

In particular, he discloses the structure of the real space called in *The Rigveda loka*: loka has a web structure, it consists of indivisible cells; cells are characterised by their interface.

Then he derived the notion of the electric charge from a few verses of *The Rigveda*: "The electric charge is kept and plays on the surface of the particle."

He identified names of gods with elementary particles: God Varuna = electron; God Mitra = proton; God Aryama = neutron; God Vishnu = universe; God Vritra = surface tension of the universe; God Indra = electric force; God Rudra = radiation; sage Vasistha (rich, a rich man) = atomic nucleus.

Then by Roy [2] the Vedic cosmology says that: 1) the universe had a beginning and it started very cold; 2) mass-energy content was zero at the beginning; 3) mass-energy is created in the form of matter and anti-matter; 4) mass-energy continuously has been created; 5) the universe has a center; 6) the universe has a boundary and all processes of creation of matter take place near the surface of the universe.

Let us read *The Bhagavad-Gita* together with Bhaktivedanta Swami Prabhupada, the great religious scholar. Let us touch Chapter 2, which is a review of the book. It contains the information on the existence of the first cause of matter in the form of an indivisible thing that is usually called "soul".

However, Bhaktivedanta Swami Prabhupada noted [3] that soul should also be understood as a **subtle particle**. Then we can read in the chapter the following:
"In spite of the material body being subject to destruction, the subtle particle is eternal" (*BhG.*: 2.18);

"It never takes birth and never dies at any time nor does it come into being again when the material body is created. It is birthless, eternal, imperishable and timeless and is inviolable when the body is destroyed" (*BhG.*: 2.20);

"After some time it is disenthralled by entire annihilation of the material body. Yet it endures the destruction of the material world" (*BhG.*: 2.22);
It is not fissionable, not burning out, not soluble, and not drying up"  

(BhG.: 2.23);  

"Since it is not visible, its entity does not change, its properties remain unchangeable" (BhG.: 2.24).  

Then in Chapter 8 we read in addition:  

"Yet there is another nature, which is eternal and is transcendental to this manifested and unmanifested matter. It is supreme and is never annihilated. When all in this world is annihilated, that part remains as it is" (BhG.: 8.20)
Conclusion

The sections quoted directly above contain serious flaws, especially at assigning names to nuclear concepts. As Khem Chand Sharma has written, one is required to hold a master’s degree in nuclear physics in order to read his textbook on nuclear physics. Lacking such knowledge, it remains impossible to make sense of his discourse. At best, these are writers who have learned the basics of nuclear particle physics yet who fail to understand the technical details or the overall view. They say, “this is that,” when at best these constitute mere guesses.

No wonder few take seriously the field of Vedic Physics. There are few good sources, and the few written pieces on the internet are too general to make much sense or gain the attention of its target audience. Writing about Vedic Physics must be specific and it must be correct to achieve effect. The present author has located a few sound sources on Vedic Physics, but these are poorly written and not well presented and so, too, have failed to attract their target audience.

The Vedas contain nuclear secrets from an advanced civilization which enjoyed a higher level of technological sophistication than our own. They, too, had nuclear weapons and experienced nuclear warfare, perhaps more terrible and more devastating than our own experiences with Hiroshima and Nagasaki. What is needed is the full development of the academic field of Vedic Particle Physics with reliable and well – written textbooks, a glossary and a bibliography. These may prove long in coming, but the author will continue to endeavor to bring these forth.

This paper makes it clear that the Rig Veda contains nuclear secrets, and that this information has been known in Hindu culture for millennia. That Sayana could translate such a passage into the speed of light does not obviate the idea that his ancestors might have done the same, millennia before him.

The same holds true for the Bhagava Gita, which perhaps has not yet found proper translation, despite the tradition of holy and learned men who have attempted such. The author notes the special numbers found in the Bhagava Gita: 24, 27, 28, 42, 72, etc. all important numbers in mathematical physics, such as the 24 Hurwitz Quarternions, the 27 or 28 Nakshastra, etc.
Ultimately the purpose of Vedic literature is to teach humanity that science and soul are one, and that one cannot exist without the other. This is why our ancestors have encoded this highly technical secret nuclear information into spiritual texts. Only those who understand one can understand the other. The only way to make intellectual progress in comprehending the vast wisdom consists of devoting oneself to spiritual practice. The two go together and may never be divorced.

Western humanity has attempted to divorce reason from spirit since the Renaissance. The corruption of the Catholic Church has necessitated this movement, and despite the Enlightenment, the British and French Revolutions, as well as the American, and Napoleonic wars intended to extend the values of the French Revolution, the Catholic Church grows progressively corrupt, which drives westerners further from religion and spirituality. The utter hypocrisy of American televangelists drives the wedge deeper. Capitalism demands atomized economic actors with no community roots, which further drives individuals from communities of worship.

One can hardly blame the people, yet the people must take responsibility, and the power and prestige of the west declines in the 21st Century, perhaps as a result of the corrupt church. India has always remained the spiritual center of the Earth, and as India rises during the century, perhaps more will return to Vedic teachings, which blend science with spirituality, and realizes the futility of divorce, the road to Nagasaki.
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Appendix

Purana Categories

1. 18 Mahapuranas
2. 18 Upa Puranas.

3. Mahapuranas can further be divided into three types.
   1. Brahma
   2. Vishnu and
   3. Shiva

4. In the first category, the Rajas guna prevails and in the second Sattvik guna whereas in the third Tamas prevails.

The Purana with Rajas quality are

1. Brahma Purana
2. Brahmand Purana
3. Brahma Vaivrata Purana
4. Markandey Purana
5. Bhavishya Purana
6. Vamana Purana

Sattva Guna dominated Puranas are

1. Vishnu Purana
2. Srimad Bhagavat Purana
3. Narad Purana
4. Garuna Purana
5. Padma Purana
6. Varaha Purana

Tamoguna prevailing Puranas are

1. Shiva Purana
2. Linga Purana
3. Skanda Purana
4. Agni Purana
5. Matsya Purana
6. Kurm Purana
Some men see things as they are and say why? I dream things that never were and say 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