Radiation in Vedic Physics

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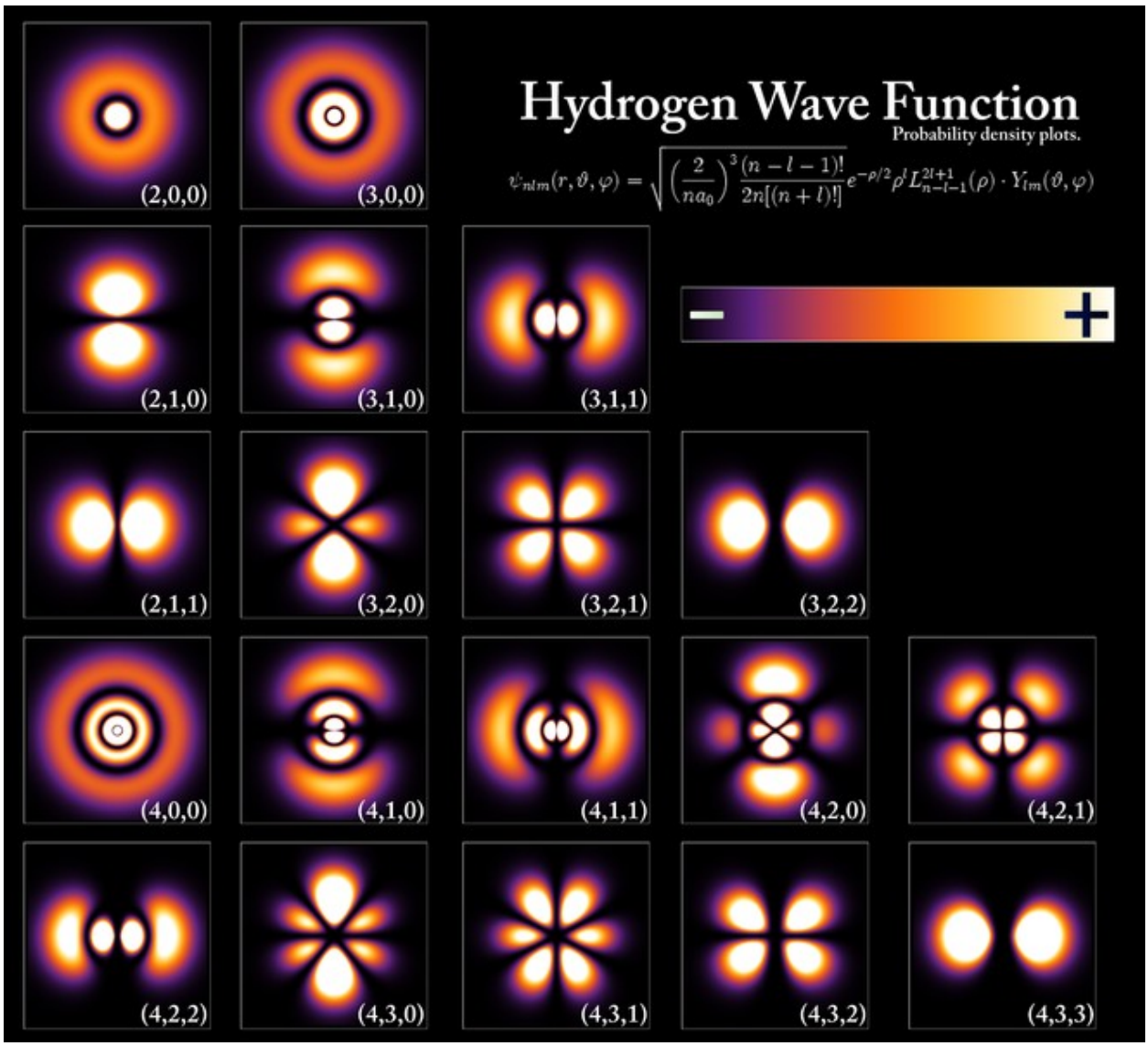

Abstract

Vedic Physics contains a concept about radiation which differs from western physics, primarily in its simplicity. This paper compares the western from Wiki to the Vedic Physics concept.

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Introduction

This paper is dedicated to Yogananda, the Indian yogi who founded the Self – Realization movement, with its beautiful temple in Pacific Palisades, California.

I had the pleasure of spending her final few years with my 90 – something grandmother, after not having seen her for two decades. Despite her Alzheimer's she was a joy to be with. My mother and I would take her on excursions to keep her happy.

One day as we headed up the Pacific Coast Highway, my mother requested a destination, as she was the driver that day. The best place I could think of was the Self – Realization Fellowship temple, so we went there. Granda delighted in the beautiful gardens, and I feel sure that Yogananda's spirit must have welcomed such a delightful spirit as that of my grandmother's in his home.

Last night I was reminded of Yogananda's mission on earth, and this series of papers on Vixra supports that mission: to make humanity realize the existence of and to believe in and understand a more spiritual science, or a more scientific spirituality, that all are one.

My grandmother, although a devout French Catholic all her life who attended mass daily, was ultimately headed for the same place where Yogananda had gone, as we all are. There is no separate heaven for Catholics, nor for Self – Realization fellowship members. Shouldn't be separation here, either.

In this respect, this paper gives a simple Vedic explanation for radiation, as well as the convoluted western explanation, so that the reader might see that we are indeed all the same, and we share the same fate.

Wikipedia On Radiation

In physics, **radiation** is a process in which electromagnetic waves (EMR) travel through a vacuum or through matter-containing media; the existence of a medium to propagate the waves is not required. A different but related definition says **radiation** is a subset of these electromagnetic waves combined with a class of energetic subatomic particles with very high kinetic energies; these are called *ionizing radiation*, and the particles are termed particle radiation. Other sorts of waves, such as acoustic, seismic, hydraulic and so on are not usually considered to be forms of "radiation" in either sense. We will consider the first definition, and return to the second later.

The word arises from the phenomenon of waves *radiating* (i.e., travel outward in all directions) from a source. This aspect leads to a system of measurements and physical units that are applicable to all types of radiation. Because such radiation expands as it passes through space, and as its energy is conserved (in vacuum), the power of all types of radiation radiating from a point source follows an inverse-square law in relation to the distance from its source. While it is most common that radiation may be emitted radially from a point source, such as a light-bulb filament or a microwave antenna, there are other modes of radiation. Some examples are radiation from a phosphorescent panel (chaotic), a laser beam (coherent), and emitted from a parabolic mirror (parallel), in which cases adherence to the inverse-square law is violated.

EMR is energy transferred by waves of combined electric charge and magnetic monopole, capable of traveling through a vacuum and traveling at the universal speed of light in whatever media it is passing through; the speed is dependent on the media, and is fastest in vacuum. In quantum mechanics these waves have been shown to have particle structure as well as wave structure; these particles are called photons. EMR includes radio and microwave signals, infrared (radiant heat), visible light and ultraviolet, and x-rays and gamma rays. These are differentiated from one another by the frequency of the waves, which directly correlates with the energy carried in each

type's photons. This is the first definition of radiation stated in the opening paragraph.

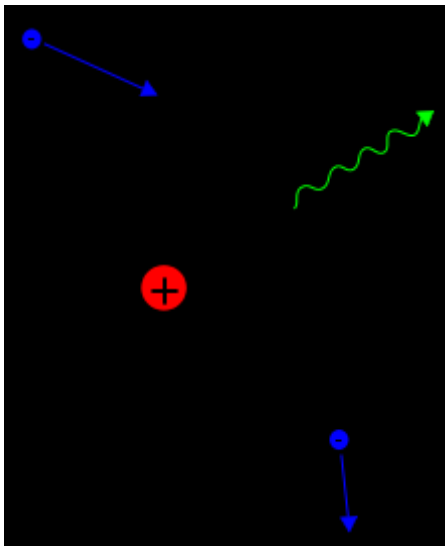
Notice that the differentiation of radiation into the classes above is somewhat arbitrary. The classes overlap at the meeting points, and the distinctions are strictly man-made, not directly apparent in the physics of the waves under study. There is, for example, no difference between an X-ray and a gamma ray except a relative difference in frequency, and thus energy.

This spectrum of radiant energy can be divided into ionizing and non-ionizing, according to whether it ionizes or does not ionize the atoms in ordinary chemical matter. Ionization is the removing of electrons from atoms, and it may be partial, in which the weaker held outer electrons are removed, grading upwards to removal of all electrons from an atom. The energy required to do this varies with the kinds of atoms and their physical state, such as temperature, chemical binding and so on. Some overlap of ionizing and non-ionizing radiation exists in the domain of ultraviolet where materials experience first simple thermal heating in the infrared and visible light, then excitation of electrons in "softer" UV, and then partial-to-total ionization as the energy increases with frequency. The second definition of *radiation* in the opening paragraph is used in reference to ionizing radiation in hard UV, x-rays, and gamma rays.

Both ionizing and non-ionizing radiation can be harmful to organisms and can result in changes to the natural environment. In general, however, ionizing radiation is far more harmful to living organisms per unit of energy deposited than non-ionizing radiation, since the ions that are produced, even at low radiation powers, leave behind atoms which, due to charge imbalance, are eager to combine in semi-random ways with other atoms in the environment; these are called free radicals. Such random chemical action in a cell may result in anything from harmless reactions, to degradation of important structures in the cell, to killing it outright or triggering suicide (apoptosis), or modifying the DNA in harmful, but yet temporarily viable ways. By contrast, most non-ionizing radiation is harmful to organisms only in proportion to the thermal energy deposited (a prime example is microwaves generated in a microwave oven), and is conventionally considered harmless at low powers that do not produce a significant temperature rise. Ultraviolet radiation in some aspects occupies the overlap in a middle ground, as it has some features of both ionizing and non-ionizing radiation. Although nearly all of the ultraviolet spectrum that penetrates the Earth's atmosphere is non-

ionizing, this radiation does far more damage to many molecules in biological systems than can be accounted for by heating effects, such as sunburn). These properties derive from ultraviolet's power to alter chemical bonds, even without having quite enough energy to ionize atoms.

The question of harm to biological systems due to low-power ionizing and non-ionizing radiation is not settled. Controversy continues about possible non-heating effects of low-power non-ionizing radiation, such as non-heating microwave and radio wave exposure. Non-ionizing radiation is usually considered to have a safe lower limit, especially as thermal radiation is unavoidable and ubiquitous. By contrast, ionizing radiation is currently conservatively considered to have no completely safe lower limit, although at some energy levels, new exposures do not add appreciably to background radiation. The evidence that small amounts of some types of ionizing radiation might confer a net health benefit in some situations is called radiation hormesis.



Here, Bremsstrahlung is produced by an electron e deflected by the electric field of an atomic nucleus. The energy change $E_2 - E_1$ determines the frequency f of the emitted photon.

Naga In Hindu Literature

In the great epic Mahabharata, the depiction of nagas tends toward the negative. An epic calls them "persecutors of all creatures", and tells us "the snakes were of virulent poison, great prowess and excess of strength, and ever bent on biting other creatures" (Book I: Adi Parva, Section 20). At some points within the story, nagas are important players in many of the events narrated in the epic, frequently no more evil nor deceitful than the other protagonists, and sometimes on the side of good.

The epic frequently characterizes nagas as having a mixture of human and serpent-like traits. Sometimes it characterizes them as having human traits at one time, and as having serpent-like traits at another. For example, the story of how the naga prince Sesha came to hold the world on his head begins with a scene in which he appears as a dedicated human ascetic, "with knotted hair, clad in rags, and his flesh, skin, and sinews dried up owing to the hard penances he was practising." Brahma is pleased with Shesha, and entrusts him with the duty of carrying the world. At that point in the story, Shesha begins to exhibit the attributes of a serpent. He enters into a hole in the Earth and slithers all the way to bottom, where he then loads the Earth onto his head. (Book I: Adi Parva, Section 36.)

Stories involving the nāgas are still very much a part of contemporary cultural traditions in predominantly Hindu regions of Asia (India, Nepal, and the island of Bali). In India, nāgas are considered nature spirits and the protectors of springs, wells and rivers. They bring rain, and thus fertility, but are also thought to bring disasters such as floods and drought.

Nagas are snakes that may take human form. They tend to be very curious. According to traditions nāgas are only malevolent to humans when they have been mistreated. They are susceptible to mankind's disrespectful actions in relation to the environment. They are also associated with waters—rivers, lakes, seas, and wells—and are generally regarded as guardians of treasure.[*citation not found*]

They are objects of great reverence in some parts of southern India where it is believed that they bring fertility and prosperity to their venerators. Expensive and grand rituals like Nagamandala[5] are conducted in their honor (see Nagaradhane). In India, certain communities called Nagavanshi consider themselves descendants of Nagas.

Adishesha is as the King of the nāgas. Nāgas live in Pātāla (patala, the seventh of the "nether" dimensions or realms.[6] They are children of Kashyapa and Kadru. Among the prominent nāgas of Hinduism are Manasa, Sesha, and Vasuki.

The Nairs of Kerala and the ethnically related Tulu Bunts of Karnataka are clans which are believed to have originated from the serpent dynasty.

The nāgas also carry the elixir of life and immortality. Garuda once brought it to them and put a cup with elixir on kusha grass but it was taken away by Indra. The nagas licked the kusha grass, but in doing so cut their tongues on the grass, and since then their tongues have been forked.[7]

Vishnu is originally portrayed in the form sheltered by a Shesha naga or reclining on Shesha, but the iconography has been extended to other deities as well. The serpent is a common feature in Ganesha iconography and appears in many forms: around the neck,[8] use as a sacred thread (Sanskrit: *yajñyopavīta*)[9] wrapped around the stomach as a belt, held in a hand, coiled at the ankles, or as a throne.[10] Shiva is often shown garlanded with a snake.[11]

Patanjali as Adi-Sesha

Maehle (2006: p. 297) states that "Patanjali is thought to be a manifestation of the serpent of eternity"

Vedic Physics Explanation of Radiation

Vedic Physics posits an eighth negative space (with atoms consisting of seven additional negative spaces) called the Naga Loka, the outermost negative space of an atom where no electrons may exist. When electrons transit this level, they are immediately disintegrated into particles which are simultaneously dissolved into the surrounding space. One may think of the Naga Loka as the space level of radiation or of electrons in space.

Conclusion

There it is plain and simple, without all the complications of western science. In its convoluted way, western science appears to have gone out of its way to complexify its own path, whereas Vedic Physics is simple, straightforward and direct.

Vedic literature has obscured the meaning of Vedic Nuclear Physics until the age when humanity had again developed to the point of understanding nuclear physics. That is why it has taken until the 20th and 21st centuries for translators to grasp the essence of these stories: the science did not exist in our civilization until then.

In this way the hidden Vedic knowledge has been carefully preserved as an object of spiritual veneration for some 14,000 years, and Indian culture has preserved this knowledge for humanity over all of that time. We must do our best to preserve what remains of this most advanced knowledge, it is the best that we have on this planet, superior to that of the west.

Bibliography

Wikipedia,

Vedic Nuclear Physics, Kend Sharma, Delhi, 2009. pp 20 -21.

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 us 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