Available online at www.scholarsresearchlibrary.com

Scholars Research Library
Archives of Physics Research, 2021, 13 (12)
(http://scholarsresearchlibrary.com)

ISSN: 2231-3176

Theory of 3 Folds and 4 Dimensional Universe

Yogesh Vishwanath Chavan*

Hindustan Aeronautics Ltd, India

***Corresponding Author:** Yogesh Vishwanath Chavan Hindustan Aeronautics Ltd, India, E-mail: yogeshsomawar1@gmail.com*

ABSTRACT

*Three Postulates are defined here, based upon current experimental limit on size of Fundamental particle i.e. upto 10- 19 m and an Empirical formula is derived (h=Q*c*k) giving maximum mass of particle within experimental range of ≈ TeV. 3rd Postulate i.e. Equivalency between "Mass" and "Straight Imaginary Line" gives co-relation between massless and spin = 1 properties of Boson as proved in QED theory. Fundamental particles of Standard Model are arranged in 3 Folds way in 4th Imaginary Dimension; Bottom Fold, Top Fold and Middle Upper and Lower Folds with decreased in energy from TeV to approx. 0 eV respectively. With this representation of the Universe at atomic and sub-atomic level, it solves lot of current problems of SM of Particle physics like Matter-Antimatter asymmetry, origin of 3 Generations or families of Fermions, Nature of gravitating dark matter and repulsive dark energy particles, cosmological coincidence, origin of mass of hadrons like protons, wave-particle duality of particles etc. giving true insight about nature of fundamental particles.*

Key words: Dimension, Universe, Structures

INTRODUCTION

Three Postulates are defined here, based upon current experimental limit on size of Fundamental particle i.e. upto 10- 19 m and an Empirical formula is derived (h=Q*c*k) giving maximum mass of particle within experimental range of ≈ TeV. 3rd Postulate i.e. Equivalency between "Mass" and "Straight Imaginary Line" gives co-relation between massless and spin = 1 properties of Boson as proved in QED theory. Fundamental particles of Standard Model are arranged in 3 Folds way in 4th Imaginary Dimension; Bottom Fold, Top Fold and Middle Upper and Lower Folds with decreased in energy from TeV to approx. 0 eV respectively. With this representation of the Universe at atomic and sub-atomic level, it solves lot of current problems of SM of Particle physics like Matter-Antimatter asymmetry, origin of 3 Generations or families of Fermions, Nature of gravitating dark matter and repulsive dark energy particles, cosmological coincidence, origin of mass of hadrons like protons, wave-particle duality of particles etc. giving true insight about nature of fundamental particles. This theory also demands existence of 4th Pair of Neutrino-AntiNeutrino. Numerous physicists, including Einstein as a component of his 'Exceptional Theory of Relativity', suggested that the final aspect is time. He said time should be an aspect like the other spatial aspects since existence are indivisible. On the off chance that you wish to travel through space, you can't do it momentarily; you need to move from where you are correct now to another spatial area, where you'll just show up at one point later on. On the off chance that you're here now, you can't be in a better place at this equivalent second, you can arrive later. Traveling through space requires you to travel through time as well. Hence, they contend that time is the fourth aspect since without it, we can't develop any significant position vector with a constant length.

Time's aspect is a line going from the past to present to future. In this way, time as the final aspect finds an article's situation at a specific second. In the event that we been able to see an article's fourth layered space-time (or world-line) it would look like a spaghetti-like line extending from the past to the future appearance the spatial area of the item at each second in time. Unlike the other spatial aspects, we can move advances on schedule. Different aspects permit you to move the two different ways. Consequently, they separate time from spatial aspects and call it a transient aspect. Then again, a few analysts, utilizing the rationale

of different aspects, actually hold out trust for observing wormholes in the universe that interface with various segments of room time.

Current logical hypotheses, for example, string hypothesis request the presence of higher aspects and this specific hypothesis requires 10 aspects. The Kaluza-Klein hypothesis (based around the possibility of a fifth aspect overseeing electromagnetism) endeavors to bind together the field hypothesis of attraction and electromagnetism. It does this by disposing of disparities between the two ideas. People can't see this aspect since it happens on a minute level. It is difficult to see such a fifth aspect, utilizing accessible energy. Be that as it may, this fifth aspect additionally depends on the final aspect being a transient aspect for example time. Entering our three-layered world as a 4-D being, would permit you to do a few astonishing things that would make you seem 'supernatural' to us people.

A portion of the tremendous things you could do incorporate instant transportation and culling us people from our three dimensional world into hyperspace (a higher aspect world). This seems like wizardry to us and makes the final aspect a miracle of material science. In his book "Hyperspace", Dr Michio Kaku, a hypothetical physicist, clarifies the higher aspects and their effect on us. Fortunately for us, in any case, 4-D creatures would not have the option to get by in a 3 layered world, very much like three dimensional creatures wouldn't make due in a world made out of 2 aspects. This is on the grounds that we would be crushed until we are totally level in a 2-D world. In the natural three-layered space of day to day existence, there are three direction tomahawks typically named x, y, and z-with every pivot symmetrical (for example opposite) to the next two. The six cardinal headings in this space can be called up, down, east, west, north, and south. Positions along these tomahawks can be called height, longitude, and scope. Lengths estimated along these tomahawks can be called stature, width, and profundity. Relatively, four-layered space has an additional a direction hub, symmetrical to the next three, which is typically marked w. To portray the two extra cardinal headings, Charles Howard Hinton instituted the terms ana and customized structure, from the Greek words signifying "up toward" and "down from", individually

REFERENCES

[1] Aharony O, Gubser SS, Maldacena JM, Ooguri H, Oz Y. Large N field theories, string theory and gravity. *Phys. Rep*. **2000**;323:183–386

[2] Arcioni G, Lozano-Tellechea E. Stability and critical phenomena of black holes and black rings. *Phys. Rev. D*. **2005**;72:104021

[3] Ashtekar A, Das S. Asymptotically anti-de Sitter space-times: Conserved quantities. *Class. Quantum Grav.* **2000**;17:L17

[4] Ashtekar A, Magnon A. Asymptotically anti-de Sitter space-times. *Class. Quantum Grav.* **1984**;1:L39–L44.

[5] Ashtekar A, Pawlowski T, Van Den Broeck C. Mechanics of higher-dimensional black holes in asymptotically anti-de Sitter space-times. *Class. Quantum Grav.* **2007**;24:625