ScieniQ Publishers

Research & Reviews Journal of Modern Physics

Research Article

INFINITY WALL

Kambiz Afrasiabi, M.D.

Associate Project Scientist, UCI

***Corresponding author**
Kambiz Afrasiabi, M.D, Associate Project Scientist, UCI

Receiveed: 23 Sept 2021
Accepted : 27 Sept 2021
Published: 02 Oct 2021

Abstract

In the last one hundred or so years, physics literature has become flooded with numerous theories trying to define initiation of known universe.

These theories range from bubble [1] and inflationary [2], to big bang [3], and steady state [4]. However different these theories are, they have two things in common:

1. They consider and give credit to an initiation force [5].
2. They do not and cannot describe what the source of that initiation force is.

Consequently, theories with such a big handicap, lose their validity and credibility. As such, as of today, we remain in the dark about the mechanism of initiation of universe, if any [6].

Infinity wall theory presents a new perspective in this regard, by tapping on a puzzling preforce and acknowledging the flaws of current theories.

Keywords: Superstring Cosmic String Zero Geometry Zero Space Time Dark Matter Dark Energy

Introduction

In early 20th century, Hubble, a retired amateur boxer, proved Albert Einstein, the giant of science wrong, when he proved expansion of universe by using doppler's effect and a small telescope on a mountain in California [7].

Contemporary astrophysicists embraced Hubble's finding, and advanced it into an ever-expanding universe theory [8].

Modern science also recognizes that around ninety-six percent of the known universe is made of dark matter [9], though it does not have any clue about its nature. However, the existence of dark matter has been proven and deciphered in different ways, including the fact that the dimensions of milky galaxy would have been much larger if it was made only of regular matter with its attributable gravitational force.

Invention of initiation force by current theories, reflects lack of understanding of initiation process.

Indeed, the most credible scientific theory, namely, the theory of relativity [10], breaks down at initiation and loses all its credibility and validity.

The major firewall, which probably has to do with the nature of our neuronal network, is lack of comprehension of zero geometry [11] and zero space time [12].

To go beyond where we are in our scientific description of behavior of the known universe, we have the obligation of extending our imagination beyond that fire wall.

The concept of virtual particles [13] in quantum mechanics [14], which takes the need for conventional theories for buildup of universe away, faces a major crisis deep inside as well.

This crisis originates from the need for recurrent and purposeful zero fluctuation of virtual particles, which defies the random nature of quantum mechanics.

To overcome similar flaws and paradoxes, one could envision a puzzling preforce which would emerge out of zero fluctuation [15], in the heart of zero geometry and zero space time. This massive, puzzling and unimaginable preforce would initiate the process of space formation. The infinitely vast space comes into existence in no time. Throughout this process, there happens exhaustion which dictates the limit of function of X, or further generation of space.

The breakdown product of preforce would act as the stabilizing force of the generated space. Such breakdown product could be considered dark matter, and its quantum fluctuation, dark energy [16]. The residual of preforce at the outermost border of universe could act as the engine for generation of the constituents of what we can now call, old universe [17].

One might consider collision of the preforce residual with infinity wall as a source of innumerable number of bangs. Massive condensation of the residual force, generated by its reflection off infinity wall, would generate infinite numbers of super strings [19], or the smallest representation of matter from this point on. Random collision of super strings would lead to an unimaginable number of different types of matter, anti-matter [19] and their indivisible sub compartments or subatomic particles [20]. This would also create all kinds of galaxies, universes, and time loops [21]. As such, there are universes that are running horizontally around one time loop, without any past and any future.

Some other universes are running at the opposite direction of time loop, ie: more and more into the past. We are the residents of a universe or baby universe that is moving along the thermodynamic arrow of time [22].

For that reason, we perceive past and future. There are also certain regions of universes or baby universes that super strings and their collisions and aggregations have not found their way into. Such regions could be considered worm holes [24], or cosmic strings [25]. If our future generations could identify and align themselves with such regions, time travel [26] and migration to other corners of one universe, or even other universes could become a reality.

The formation of infinite number of universes and baby universes, with infinite number of destinies and time loops could be appreciated by several examples given in Figures 1-6.

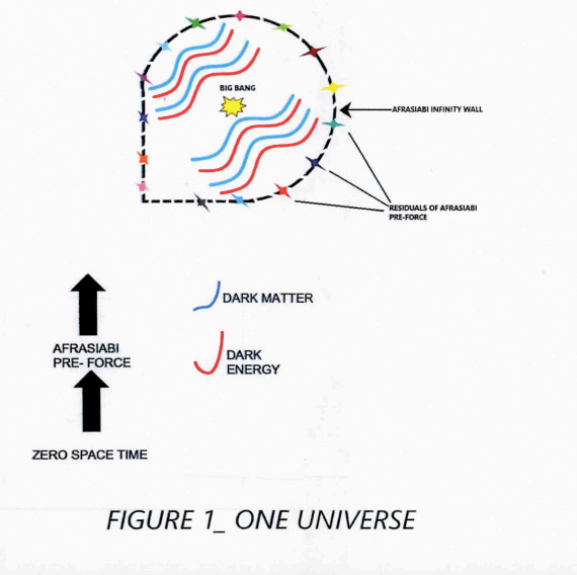

Figure 1. One univers

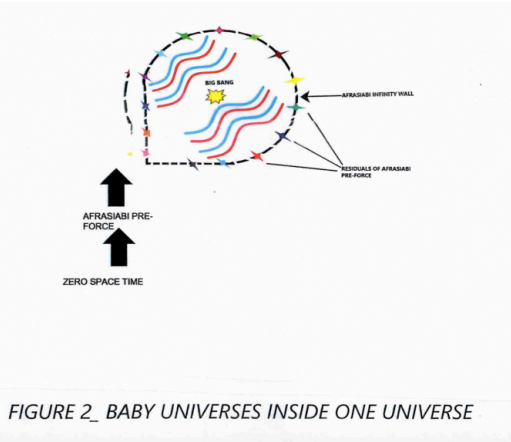

Figure 2. Baby Universes inside one univers

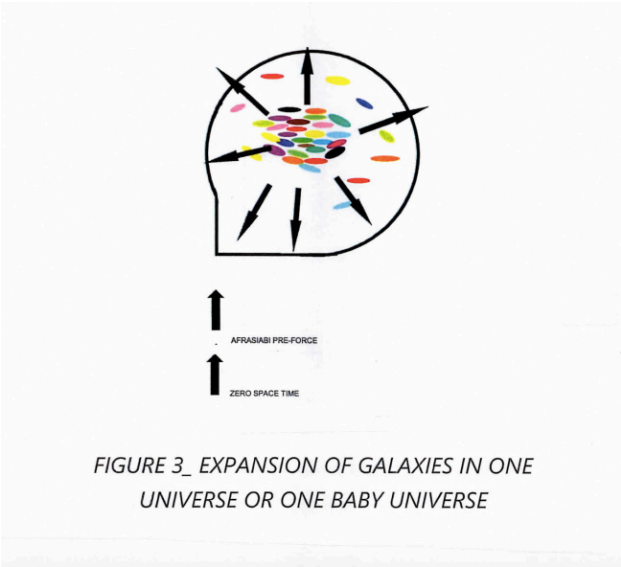

Figure 3. Expansion of galaxies in one univers or one baby universe

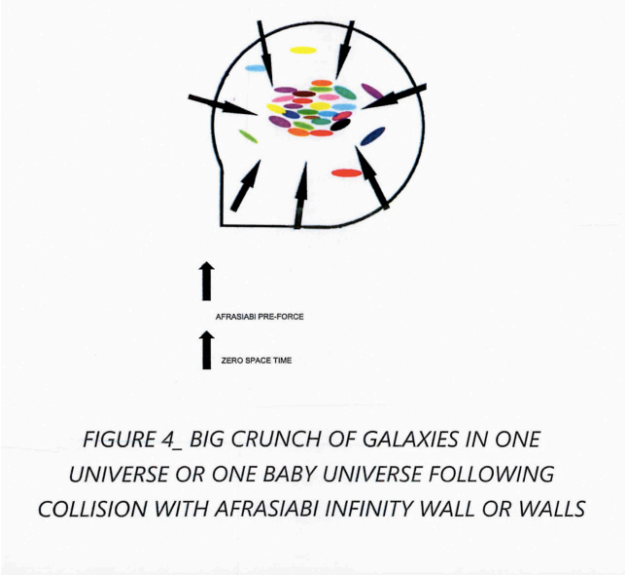

Figure 4. Big crunch of galaxies in one Universe or one baby Universe following collision with afrasiabi infinitiy wall or walls

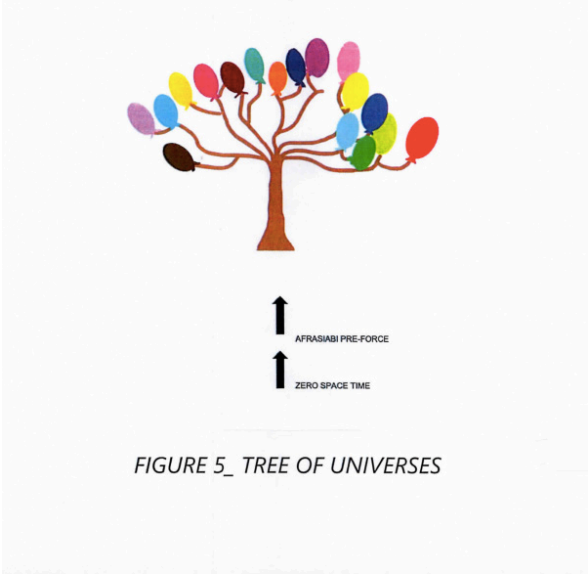

Figure 5. Tree of Universes

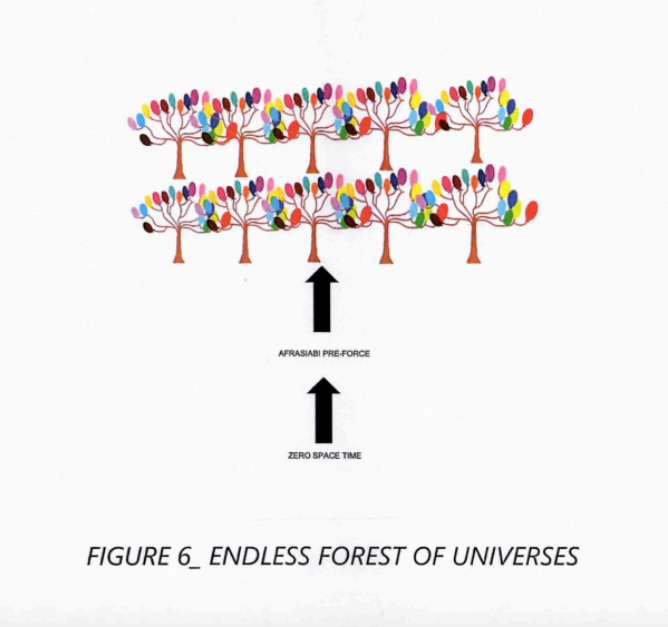

Figure 6. Endless forest of Universes

Conclusion

The current theories in the explanation of origin of universe share two common flaws, namely, invention of an initiation force such as big bang, and inability to explain the source of initiation force.

Consequently, they lose their scientific credibility and validity.
Infinity wall theory opens the window of opportunity to generate a new foundation for generation of universe and multiverses [26], with infinite number of destinies, time loops [27], and diversity of their constituents.

Detailed mathematical analysis of infinity wall theory, would potentially enable our future generations, to identify and align themselves with cosmic strings, and make travel from one corner of universe, or baby universe to another comer, as well as travel among different universes, a possibility.

Among the many other implications of infinity wall theory, one is that both Hubble and Albert Einstein were right.

Hubble was right, simply because the galaxies in our universe, or comer of universe are moving apart or expanding.

Albert Einstein was right, simply because the generated universe from pre-force ends at infinity wall and would never increase/expand or decrease/shrink following its formation.

References

1. Stone, M. (1976). Lifetime and decay of excited vacuum states. Phys. Rev. D. 14: 3568–3573. doi:10.1103/PhysRevD.14.3568.
2. Guth, A.H. (1981). Inflationary universe: A possible solution to the horizon and flatness problems. Phys. Rev. D. 23: 347-356. doi:10.1103/PhysRevD.23.347
3. Singh, S. (2004). Big Bang: The Origin of the Universe (1st U.S. ed.). New York: Fourth Estate.
4. Bondi, H. & Gold, T. (1948). The Steady-State Theory of the Expanding Universe. Monthly Notices of the Royal Astronomical Society. 108: 252. doi: 10.1093/mnras/108.3.252.
5. Unruh, W.G. & Semenoff, G.W. (Eds.). (1988). The early universe. Reidel.
6. Greene, B. (2011). The Hidden Reality. Alfred A. Knopf.
7. Sharov, A.S. & Novikov, I.D. (1993). Edwin Hubble, the discoverer of the Big Bang universe. Cambridge University Press. (p. 34).
8. Bartusiak, M. (2010). The Day We Found the Universe. Random House Digital, Inc. (pp. x-xi).
9. Bahcall, N.A. (2015). Dark matter universe. Proceedings of the National Academy of Sciences of the United States of America, 112: 12243–12245. doi: 10.1073/pnas.1516944112.
10. Einstein, A. (1920). Relativity: The Special and General Theory. New York: H. Holt and Company. (Original work published 1916).
11. Korol, R., Rosa-Raíces, J.L., Bou-Rabee, N., & Miller, T.F., 3rd. (2020). Dimension-free path-integral molecular dynamics without preconditioning. The Journal of Chemical Physics, 152: 104102. doi: 10.1063/1.5134810.
12. Amelino-Camelia, G. (2013). Quantum-Spacetime Phenomenology. Living reviews in relativity, 16: 5. doi: 10.12942/lrr-2013-5.
13. Jaeger, G. (2019). Are Virtual Particles Less Real? Entropy, 21: 141. doi: 10.3390/e21020141
14. Feynman, R., Leighton, R., & Sands, M. (1964). The Feynman Lectures on Physics. Addison–Wesley.
15. Sciama, D.W. (1991). The Physical Significance of the Vacuum State of a Quantum Field. In S. Saunders & H. Brown (Eds.). The Philosophy of Vacuum. Oxford University Press.
16. Pahlavani, M.R. (2015). Selected Topics in Applications of Quantum Mechanics (p. 118). BoD.
17. Zeilik, M. & Gregory, S.A. (1998). Introductory Astronomy & Astrophysics (4th ed.). Saunders College Publishing.
18. Rickles, D. (2014). A Brief History of String Theory: From Dual Models to M-Theory (p. 104). Springer
19. Blas D. (2018). Theoretical aspects of antimatter and gravity. Philosophical transactions. Series A, Mathematical, physical, and engineering sciences, 376: 20170277. doi: 10.1098/rsta.2017.0277.
20. Barbeau, P.S. (2017). Particle physics: The search for no neutrinos. Nature, 544: 38–39. doi: 10.1038/544038a.
21. Lobo, F. (2003). Time, Closed Timelike Curves and Causality. NATO Science Series II. 95: 289–296. doi: 10.1007/978-94-010-0155-7_30.
22. Van Ness, H.C. (1983). Understanding Thermodynamics. Dover Publications, Inc. (Original work published 1969).
23. Blázquez-Salcedo, J.L., Knoll, C., & Radu, E. (2021). Traversable Wormholes in Einstein-Dirac-Maxwell Theory. Physical Review Letters. 126: 101102. doi: 10.1103/PhysRevLett.126.101102.
24. Kibble, T. (1976). Topology of cosmic domains and strings. Journal of Physics A: Mathematical and General. 9: 1387–1398. doi:10.1088/0305-4470/9/8/029.
25. Thorne, K.S. (1994). Black Holes and Time Warps. W. W. Norton.
26. Kragh, H. (2009). Contemporary History of Cosmology and the Controversy over the Multiverse. Annals of Science, 66: 529–551. doi:10.1080/00033790903047725.
27. Krasnikov, S. (2001). The time travel paradox. Phys. Rev. D, 65: 06401. doi: 10.1103/PhysRevD.65.064013.

Cite this article: Kambiz Afrasiabi, M.D. (2021) INFINITY WALL. Research & Reviews Journal of Modern Physics, 1: 6-8.