Poster Session #C
Gravity theories

C07

A multiverse model generalization of Penrose CCC cosmology as to how to obtain high frequency Gravitational waves from the onset of inflation and the starting Planckian regime of space-time

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Starting from a multiverse generalization of Penrose Cyclic Conformal cosmology, as a feed into the starting point for inflation, we re do a standard energy density of a bosonic field calculation $\sim$ h (bar) times k^4 which is proportional to 2×10^{71} times GeV to the 4th power, whereas the standard result for DE, if commensurate to experimental observations is $1/10^{120}$ times smaller. If we look at $k \sim 2 * \pi/\lambda$, whereas λ is the wavelength, we find that the wavelength initially would have to be 10^{30} times larger than the wavelength which yielded the bosonic field value of 2×10^{71} times GeV to the 4th power. The aim of this paper is to discuss a pre inflationary geometry as for how this could come about, using the work done by the author in the publication Using "Enhanced Quantization" to Bound the Cosmological Constant, (for a Bound-on Graviton Mass), by Comparing Two Action Integrals (One Being from General Relativity) at the Start of Inflation" which is in the Fundamental Physics and Physics Education Research springer Verlag Publication(2021). Upon obtaining this value of the cosmological constant and factoring in, its connections to a Pre Planckian space-time geometry, we then specify that if the cosmological constant is proportional to the square of the mass of a graviton, we can then specify a vacuum energy density of 10^{120} times larger than that of the free space DE which would then be used, to specify an enormous initial Frequency for gravitons of mass m(graviton) as specified by also assuming an initial entropy of about 10^{30} or more from the Planckian regime of space-time to the electroweak. regime of space-time. The DE/ cosmological constant energy would be specified within a bubble of space time with feed in from a multiverse , with the multiverse allowing for 10^{30} times larger initial wavelength prior to energy being fed into a near singularity of space-time which would have a dramatically decreased value of $k \sim 2 \times \pi/\lambda$, which in turn if the singularity were built up could, if 10^{30} times energy density of DE lead to initially very high frequency Gravity waves