

Abstract Submitted
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Using di quark scalar fields for a cosmological constant permitting gravitons escaping from early universe branes ANDREW BECKWITH
— We construct a model showing how a di quark condensate leads to a cosmological constant in line with known physical observations instead of the huge value obtained via Quantum Chromodynamics We apply Abbots criteria of a bound for the cosmological constant without his enormous tunneling time value which effectively caused his model to be abandoned as unworkable in the mid 1980s. We use a phase transition bridge from a tilted washboard potential to the chaotic inflationary model pioneered by Guth which is congruent with the slow roll criteria. This permits a physically intuitive criteria for initiation of graviton production from a domain wall formed after a transition to a chaotic inflationary potential. We believe our construction answers why gravitons would be so hard to find in typical post inflationary cosmological conditions while pointing to their de facto existence in de Sitter metric cosmology. In addition, our criterion for graviton production is in tandem with the creation of cold dark matter, indirectly observed in present day cosmology.

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