

## BRIEF SURVEY OF THE UNIVERSE EVOLUTION MODELS: INCOMPLETENESS, ENTANGLEMENT, AND SOME UNEXPECTED CONVERGENCE

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**Abstract.** *The main goal of the present study refers to the actualization of our previous similar study from 2008 [1], especially relative to the: a) aspects of: (i) incompleteness of the fundamentals of the Cosmological theoretical models, (ii) entanglement of the main actual Physics theories, those of the Quantum Physics, and of the Einstein's gravitation theory, respectively, b) emphasis of some unexpected convergence of the most distant (extreme) basic models of the Universe evolution.*

**Keywords:** Incompleteness, Entanglement, Some Convergences of the extreme models of the Universe Evolution

### 1. Introduction

Our previous similar study of the theoretical models of the Universe evolution involved a lot of such models [1], but didn't examined carefully: a) the implications of the basic present physical theories, those of the Quantum Physics, and of the Einstein's theory of gravitation, and: b) the appearance of some unexpected convergence of the most distant models of the Universe evolution.

Given being the study of such a topic needs the examination of both the: a) materialistic approaches based on: (i) experiment and: (ii) rigorous theoretical models, as well as of: (iii) some intuitive approaches, and of the: b) theistic models, this study will present all viewpoints, with the emphasis of the elements presented in the American academic textbooks from this century (see e.g. [2]), involving also the scientific syntheses accomplished by high-level reviews of public information, as *Scientific American* (see e.g. [1], [3a], etc), *Discover* [3b], *Europhysics News* [4], *Science et Vie (France)* [5], etc.

### 2. Classical (already studied) Fundamental Interactions

It is rather strange that the basic features of the fundamental interactions were studied carefully only in the last 120 years. It was found that excepting the unimaginable short duration (after the appearance of the cosmological singularity that led to the formation of the known Universe), named *Planck's duration* ( $t_P$ ),

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