

FFGFT: Cosmic Relations

Abstract

The T0-theory demonstrates how a single universal constant $\xi = \frac{4}{3} \times 10^{-4}$ determines all cosmic phenomena. This document presents the fundamental relationships between the gravitational constant, cosmic microwave background radiation (CMB), Casimir effect and cosmic structures within the framework of a static, eternally existing universe. All derivations are performed in natural units ($\hbar = c = k_B = 1$) and respect the time-energy duality as a fundamental principle of quantum mechanics.

Contents

0.1 Introduction: The Universal ξ -Constant

0.1.1 Foundations of T0 Theory

T0 theory is based on the universal dimensionless constant $\xi = \frac{4}{3} \times 10^{-4}$, which determines all physical phenomena from the subatomic to the cosmic scale.

T0 theory revolutionizes our understanding of the universe through the introduction of a single fundamental constant. This constant forms the basis for all physical calculations and predictions of the theory:

$$\xi = \frac{4}{3} \times 10^{-4} = 1.33333\dots \times 10^{-4} \quad (1)$$

This dimensionless constant connects quantum and gravitational phenomena, enabling a unified description of all fundamental interactions.