

Mathematical Formulas from DOCUMENTATION.md

Theory of Everything Mathematical Formulas

Introduction

This document contains mathematical formulas extracted from the Theory of Everything documentation. The formulas are rendered using LaTeX to ensure proper mathematical notation and readability. Each formula is presented with its name, the equation itself, and a brief description of its significance.

Inline Formula

Inline Formula

$S_{\text{(text{quantum})}}$

Extracted from inline LaTeX notation

Extracted from inline LaTeX notation

Inline Formula

Inline Formula

$S_{\text{(text{quantum})}}$

Extracted from inline LaTeX notation

Extracted from inline LaTeX notation

Inline Formula

Inline Formula

S_{quantum}

Extracted from inline LaTeX notation

Extracted from inline LaTeX notation

Inline Formula

Inline Formula

S_{quantum}

Extracted from inline LaTeX notation

Extracted from inline LaTeX notation

Display Formula

Display Formula

$S = S_{\text{gravity}} + S_{\text{matter}} + S_{\text{gauge}} + S_{\text{quantum}}$

Extracted from display LaTeX notation

Extracted from display LaTeX notation

Dirac Equation

Dirac Equation

$(i\gamma^\mu \partial_\mu - m)\psi = 0$

The Dirac equation is a relativistic wave equation that describes spin-1/2 particles.

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Unified Field Theory

Unified Field Theory

$$G_{\mu\nu} + \Lambda g_{\mu\nu} = \frac{8\pi G}{c^4} T_{\mu\nu} + \alpha F_{\mu\nu}$$

A proposed unified field theory combining gravity with electromagnetic forces.

A proposed unified field theory combining gravity with electromagnetic forces.

Quantum Gravity

Quantum Gravity

$$\hat{G}_{\mu\nu} |\Psi\rangle = \hat{T}_{\mu\nu} |\Psi\rangle$$

A theoretical framework attempting to reconcile quantum mechanics with general relativity.

A theoretical framework attempting to reconcile quantum mechanics with general relativity.