

Neutrinos dans la Théorie T0

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Chapter 1

Neutrinos

1.1 Introduction

Les neutrinos sont parmi les particules les plus mystérieuses de la physique. Dans le cadre de la théorie T0, leurs propriétés uniques peuvent être comprises à travers la dualité temps-masse et le paramètre ξ .

1.2 Oscillations des Neutrinos

Les oscillations des neutrinos entre différentes saveurs (électronique, muonique, tauonique) sont un phénomène quantique fondamental.

$$P(\nu_\alpha \rightarrow \nu_\beta) = \sin^2(2\theta) \sin^2\left(\frac{\Delta m^2 L}{4E}\right) \quad (1.1)$$

title

Dans la théorie T0, les oscillations des neutrinos résultent de la structure fractale de l'espace-temps :

$$\Delta m^2 = \xi^n \cdot m_{\text{Planck}}^2 \quad (1.2)$$

où n dépend de la géométrie ξ .

1.3 Masses des Neutrinos

La théorie T0 prédit les masses des neutrinos en fonction du paramètre ξ :

1. $m_{\nu_1} = \xi^{a_1} \cdot m_e$
2. $m_{\nu_2} = \xi^{a_2} \cdot m_e$
3. $m_{\nu_3} = \xi^{a_3} \cdot m_e$

1.4 Neutrinos cosmiques

Les neutrinos cosmiques jouent un rôle crucial dans :

- Le fond de neutrinos cosmiques ($C\nu B$)
- La nucléosynthèse primordiale
- La formation des structures à grande échelle

1.5 Prédiction testables

title
<ul style="list-style-type: none">• Hiérarchie des masses des neutrinos• Angles de mélange précis• Violation CP dans le secteur des neutrinos

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