

Cosmologie Géométrique

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Chapitre 1

Cosmologie Géométrique

1.1 Introduction

La cosmologie géométrique étudie la structure à grande échelle de l'univers. La théorie T0 offre une approche géométrique unifiée.

1.2 Géométrie de l'univers

Trois géométries possibles :

1. Plate ($k = 0$)
2. Sphérique ($k > 0$)
3. Hyperbolique ($k < 0$)

title

Dans T0, la géométrie est déterminée par le champ ξ :

$$R = f(\xi) \tag{1.1}$$

où R est le rayon de courbure.

1.3 Courbure et matière

L'équation de Friedmann modifiée :

$$H^2 + \frac{k}{a^2} = \frac{8\pi G}{3}\rho + \Lambda_\xi \tag{1.2}$$

où Λ_ξ est la contribution du champ ξ .

1.4 Structure fractale

L'univers T0 a une structure fractale à toutes les échelles.

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