

Kosmische Phänomene in der T0-Theorie

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Kapitel 1

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Zusammenfassung

Die T0-Theorie bietet neue Perspektiven auf kosmische Phänomene wie Rotverschiebung, Hintergrundstrahlung und großräumige Strukturen. Dieses Dokument untersucht, wie der fundamentale Parameter ξ kosmologische Beobachtungen erklärt.

1.1 Kosmische Rotverschiebung

1.1.1 Standardinterpretation

Die kosmische Rotverschiebung wird üblicherweise als Expansion des Raumes interpretiert:

$$z = \frac{\lambda_{\text{beob}} - \lambda_{\text{emit}}}{\lambda_{\text{emit}}} = \frac{a(t_0)}{a(t_e)} - 1 \quad (1.1)$$

1.1.2 T0-Interpretation

In der T0-Theorie entsteht die Rotverschiebung durch das variable Zeitfeld:

$$z = \frac{T(r) - T_0}{T_0} \quad (1.2)$$

Dies erklärt Rotverschiebung ohne echte Raumexpansion.

1.2 Kosmische Mikrowellen-Hintergrundstrahlung

1.2.1 Der CMB

Die CMB mit $T = 2,725$ K ist ein Abbild des frühen Universums.

1.2.2 T0-Vorhersagen

Die T0-Theorie sagt spezifische Abweichungen im CMB-Spektrum vorher:

$$\Delta T(\theta) = \sum_{\ell} a_{\ell} Y_{\ell}(\theta) \quad (1.3)$$

wobei die Multipol-Koeffizienten a_{ℓ} durch ξ modifiziert werden.

1.3 Großräumige Strukturen

1.3.1 Galaxienhaufen und Filamente

Die Verteilung von Materie im Universum folgt in T0 aus dem Zeitfeld:

$$\rho(x) \propto \frac{1}{T(x)} \quad (1.4)$$

Hohe Dichte entspricht kurzer intrinsischer Zeit.

Kosmische Strukturbildung

In der T0-Theorie ist die Strukturbildung des Universums eine natürliche Konsequenz der Zeitfeld-Dynamik. Regionen mit kurzer intrinsischer Zeit ziehen Materie an, was zu Galaxien und Galaxienhaufen führt.

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