Observer Time Ratio X(z) – CFT vs GR

This document presents the results of comparing the observer time ratio X(z) as predicted by Chronotension Field Theory (CFT) against the baseline expectation of General Relativity (GR). The function X(z) represents the ratio of CFT time flow to observer time, providing insight into how time remapping in CFT influences observable quantities such as redshift.

# Plot Interpretation

The accompanying figure shows X(z) along the redshift axis (z). In General Relativity, X(z) is constant at 1, indicating no deviation between coordinate and observer time. In contrast, CFT predicts a deviation where time flows differently depending on the η(t) viscosity field, resulting in X(z) > 1 at higher redshifts. This suggests that time flowed 'slower' internally than it appears to us observationally, explaining CFT's initial overprediction of H(z) and helping to reconcile expansion rates.

See figure: Xz\_CFT\_vs\_GR.png

# Implications for CFT

This result supports the CFT interpretation of time as a dynamic, viscous field. By introducing a remapping between internal and observer time, CFT aligns more accurately with observed H(z) expansion data without needing dark energy. This remapping may also influence other observables like redshift, lensing, and structure formation.