

ANISOTROPIC NULL STRING COSMOLOGIES

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Abstract

We study string propagation in an anisotropic, cosmological background. We solve the equations of motion and the constraints by performing a perturbative expansion of the string coordinates in powers of c^2 , the world-sheet speed of light. To zeroth order the string is approximated by a tensionless string (since c is proportional to the string tension T). We obtain exact, analytical expressions for the zeroth and the first order solutions and we discuss some cosmological implications.

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